

CONTRACT DOCUMENTS

AND

TECHNICAL SPECIFICATIONS

BID #FY2010-2011-006

HALLANDALE BEACH ELEVATED WATER STORAGE TANKS REPAIR FOR BLUESTEN PARK AND BEACH TANK

PREPARED BY:
CITY OF HALLANDALE BEACH
DEPARTMENT OF UTILITIES & ENGINEERING
AND
GENERAL SERVICES/PURCHASING
DEPARTMENT

NOTICES TO PROSPECTIVE BIDDERS MANDATORY PRE-BID MEETING AND SITE VISITS

<u>LOCAL VENDOR PREFERENCE IS APPLICABLE TO THIS BID SEE PAGE [19] ITEM</u> # [28].

MANDATORY SITES VISIT ARE AVAILABLE BY APPOINTMENT ONLY DURING THE WEEK OF MONDAY, JULY 25, 2011 THROUGH FRIDAY, JULY 29, 2011. CONTACT RICHARD LABINSKY, PE. CITY ENGINEER @ (954) 457-3042 OR ABIDEMI AJAYI, E.I., ENGINEER I (954) 457-1621

MANDATORY PRE-BID MEETING IS SCHEDULED FOR WEDNESDAY, JULY 20, 2011 @ 11:00 A.M., AT CITY OF HALLANDALE BEACH MUNICIPAL COMPLEX, CITY HALL, CITY COMMISSION CHAMBERS, 400 SOUTH FEDERAL HIGHWAY, HALLANDALE BEACH, FLORIDA.

ATTENDANCE AT THE PREBID CONFERENCE <u>IS MANDATORY</u>.

IF YOU DO NOT ATTEND THE MANDATORY PREBID CONFERENCE YOUR BID SUBMISSION WILL NOT BE ACCEPTED.

<u>PLEASE REVIEW THE BID AND BRING YOUR QUESTIONS TO THE MANDATORY</u> CONFERENCE SINCE IT WILL BE THE ONLY OPPORTUNITY TO ASK QUESTIONS.

BIDDERS MINIMUM QUALIFICATION REQUIREMENTS:

- > Bidders must provide evidence that firm is certified and licensed to perform scope of work in the State of Florida.
- Provide a letter on your company's letterhead indicating that firm providing proposal has a minimum of five (5) years of experience providing the services requested in this bid. The firm responding must possess a minimum of five (5) years experience under its current business name. Include the name, address, and the telephone number of the Owner Company for which services were provided for each project.
- ➤ Provide five (5) references of projects of a similar size, scope and complexity to this Bid that have been completed by your company within the last five (5) years. Provide the name of company/owner/business, contact name of individual and his or her role/title, address of the company, and telephone number for which services were performed. The City will contact the names and numbers provided to check these references. Similar projects shall be a minimum of 250,000-gallon tank size and 500,000 − gallon tank size shall include full containment.

Title Page

Please submit a title page showing the Bid subject, the firm's name; the name, address and telephone number of the contact person; and the date of the proposal. With this title page your firm must also clearly provide all the information required to meet the Bidder's Minimum Qualification Requirements. It may be provided as an attachment or as a continuation of the title page.

IF THE MINIMUM QUALIFICATIONS ABOVE ARE NOT MET THE BIDDER'S SUBMITTAL WILL BE DEEMED NON-RESPONSIVE AND WILL NOT BE CONSIDERED.

CONTRACT AWARD:

This Bid consists of two (2) project parts for bidding: Project A, Project B or Project C which consists of scope of work to be completed in the consecutive order of completion of Project A and then completion of Project B. The City may award a contract to one or more firms being the lowest responsive bidder to Project [A] or Project [B] or Project [C] in the best interest of the City. Therefore, award of each project may result in the City awarding one or more firms.

CONTRACT TERM:

Contract may be cancelled within thirty (30) days with a written notice by the City of Hallandale Beach.

SAMPLE FORM CONTRACT:

The City's Form Contract is attached as part of this solicitation. The Vendor's submission of a Bid response without identifying variances expressly acknowledges and formally evidences the Vendor's acceptance of all terms and conditions of the form Contract. Any and all variances must be submitted in writing by the Vendor.

TIME FRAME FOR COMPLETION OF PROJECT:

TIME IS OF THE ESSENCE FOR THIS PROJECT. THE WORK SHALL BE SUBSTANTIALLY COMPLETED WITHIN 90 CALENDAR DAYS (FOR EACH TANK) FROM THE PROJECT INITIATION DATE SPECIFIED IN THE NOTICE TO PROCEED AND COMPLETED AND READY FOR FINAL PAYMENT WITHIN 120 CALENDAR DAYS FROM THE PROJECT INITIATION DATE SPECIFIED IN THE NOTICE TO PROCEED.

RETURN COMPLETE CITY BID PACKAGE FORMS AS FOLLOWS:

- CERTIFICATE OF COMPETENCY AND/OR STATE REGISTRATION
- DRUG FREE WORKPLACE FORM
- > BID TENDER FORM
- > SCHEDULE OF BIDDER'S PRICES
- PUBLIC ENTITY CRIME FORM
- > SUPPLEMENT TO BID/TENDER FORM

BID OPENING DUE DATE: MONDAY, AUGUST 8, 2011 @ 11:00 A.M. FRIDAY, AUGUST 12, 2011 @ 11:00 AM - BID #2010-2011-006: HALLANDALE BEACH ELEVATED WATER STORAGE TANKS REPAIR.

BIDDERS MUST SUBMIT: RESPONSES MUST BE SUBMITTED IN THE FORM OF ONE (1) ORIGINAL AND ONE (1) TRUE AND EXACT CD-ROM COPY (PDF). THE BID PACKAGE MUST CONTAIN AND INCLUDE ALL BID PAGES. REMEMBER TO SIGN, NOTARIZE, AND ATTEST ALL REQUIRED PAGES.

BIDS SHALL BE SUBMITTED IN SEALED ENVELOPES. BIDS MUST BE MAILED OR HAND DELIVERED TO:

CITY OF HALLANDALE BEACH
CITY CLERK'S OFFICE
ROOM 242
400 S. FEDERAL HIGHWAY
HALLANDALE BEACH, FLORIDA 33009
BID # FY 2010-2011-006: HALLANDALE BEACH ELEVATED WATER STORAGE
TANKS REPAIR FOR BLUESTEN PARK AND BEACH TANK

NOTE: Failure to comply with all items stated in the Bid may be cause for rejection of the Proposal.

UNABLE TO SUBMIT BID? We sincerely hope this is not the case. If your firm cannot submit a BID at this time, please provide the information requested in the space provided below and return:

WE	HAVE RECEIVED THE BID
COMPANY NAME	
WE ARE UNABLE TO RECROND TO THE RID AT THIS TIME	
WE ARE UNABLE TO RESPOND TO THE BID AT THIS TIMEREASONS:	E DUE TO THE FOLLOWING
COMPLETE INFORMATION BELOW:	
SIGNATURE:	
TITLE:	
STREET ADDRESS: (OR)	
P.O. BOX:	
CITY:	
STATE:	ZIP CODE:
TELEPHONE/AREA CODE: ()	
EMAIL ADDRESS:	

RETURN THIS UNABLE TO SUBMIT FORM ONLY TO:
CITY OF HALLANDALE BEACH
GENERAL SERVICES DEPARTMENT
400 SOUTH FEDERAL HIGHWAY, ROOM 242
HALLANDALE BEACH, FL 33009



PROSPECTIVE BIDDERS' NOTICE PROJECT DRAWINGS AND PROJECT INSPECTION REPORTS

EXHIBITS [A] BLUESTEN PARK STORAGE TANK INSPECTION REPORT; EXHIBIT [B] BEACH STORAGE TANK INSPECTION REPORTS; AND EXHIBIT [C] PROJECT DRAWINGS ARE AVAILABLE VIA THE CITY OF HALLANDLE BEACH WEBSITE AT NO COST. <u>DOWNLOAD INSTRUCTIONS BELOW</u>.

VENDOR NOTE:

THE INSPECTION REPORTS ARE BASED ON THE CURRENT CONDITIONS OF THE WATER STORAGE TANKS. THE CONTRACTORS ARE TO FOLLOW THE TECHNICAL SPECIFICATIONS OUTLINED ON PAGES 90 THROUGH 149 NOT THE INSPECTION REPORT. THE REPORTS HAVE BEEN INCLUDED SO THAT FIRMS ARE AWARE OF THE EXTENSIVE REPAIR THAT NEEDS TO BE PERFORMED.

BIDS & RFPS DOCUMENTS DOWNLOAD INSTRUCTIONS:

The City of Hallandale Beach General Services/Purchasing Department prefers that the Bid #FY2010-2011-006 document be obtained through the City of Hallandale Beach Website at www.hallandalebeachfl.gov main page scroll down to button and Select Bids & Contract; or Select: Departments; Select: General Services and Purchasing; Select: Bids Notifications. If your company is downloading a copy of the Bid, Please complete the "Request for Current Bid, RFPs, RFQs Form" for our records or email General Services Office@hallandalebeachfl.gov or fax written requests to (954) 457-1342.

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BID #FY2010-2011-006 REVISED: 8-8-11

NOTICE TO BIDDERS

Sealed bids for providing and delivering all necessary labor, materials, equipment, and services for the completion of the work, including installation of materials, supplies and equipment sold and delivered to the CITY OF HALLANDALE BEACH ELEVATED
WATER STORAGE TANKS REPAIR, LOCATED AT BLUESTEN PARK 501 SE 1ST
AVENUE AND BEACH TANK 2801 EAST HALLANDALE BEACH BOULEVARD,
HALLANDALE BEACH, FLORIDA FOR BID #FY2010-2011-006. Bid Submissions will be received by the City Clerk Office, 400 South Federal Highway, Hallandale Beach, Florida for the City of Hallandale Beach, until 11:00 A.M., MONDAY, AUGUST 8, FRIDAY, AUGUST 12, 2011. Bids will be publicly opened and read aloud in Room 252 or other designated area, at City Hall, 400 South Federal Highway, Hallandale Beach, Florida.

LOCAL VENDOR PREFERENCE IS APPLICABLE TO THIS BID SEE PAGE [19] ITEM # [28].

BIDDERS MINIMUM QUALIFICATION REQUIREMENTS:

- > Bidders must provide evidence that firm is certified and licensed to perform scope of work in the State of Florida.
- Provide a letter on your company's letterhead indicating that firm providing proposal has a minimum of five (5) years of experience providing the services requested in this bid. The firm responding must possess a minimum of five (5) years experience under its current business name. Include the name, address, and the telephone number of the Owner Company for which services were provided for each project.
- ➤ Provide five (5) references of projects of a similar size, scope and complexity to this Bid that have been completed by your company within the last five (5) years. Provide the name of company/owner/business, contact name of individual and his or her role/title, address of the company, and telephone number for which services were performed. The City will contact the names and numbers provided to check these references. Similar projects shall be a minimum of 250,000-gallon tank size and 500,000 − gallon tank size shall include full containment.

Bidders must provide proof of these minimum qualifications with the submission of bid.

RETURN COMPLETE CITY BID PACKAGE FORMS AS FOLLOWS:

- CERTIFICATE OF COMPETENCY AND/OR STATE REGISTRATION
- > DRUG FREE WORKPLACE FORM
- > BID TENDER FORM
- > SCHEDULE OF BIDDER'S PRICES
- > PUBLIC ENTITY CRIME FORM
- > SUPPLEMENT TO BID/TENDER FORM

IF THE MINIMUM QUALIFICATIONS ARE NOT MET, THE BIDDER'S SUBMITTAL WILL BE DEEMED NON-RESPONSIVE. BIDS WILL BE CONSIDERED ONLY FROM

BIDDERS THAT ARE REGULARLY ENGAGED IN THE BUSINESS OF PROVIDING SERVICES AS DESCRIBED IN THIS BID.

ESTIMATED BUDGET FOR THIS PROJECT IS \$500,000.00

MANDATORY PREBID CONFERENCE IS SCHEDULED ON WEDNESDAY, JULY 20, 2011, AT 11:00 O'CLOCK AT THE FOLLOWING LOCATION:

CITY OF HALLANDALE BEACH
CITY COMMISSION CHAMBERS
400 S. FEDERAL HIGHWAY
HALLANDALE BEACH, FLORIDA 33009
BID # FY 2010-2011-006: HALLANDALE BEACH ELEVATED WATER STORAGE
TANKS REPAIR FOR BLUESTEN PARK AND BEACH TANK

ATTENDANCE AT THE PREBID CONFERENCE IS MANDATORY.

IF YOU DO NOT ATTEND THE MANDATORY PREBID CONFERENCE YOUR BID SUBMISSION WILL NOT BE ACCEPTED.

<u>PLEASE REVIEW THE BID AND BRING YOUR QUESTIONS TO THE MANDATORY</u> <u>CONFERENCE SINCE IT WILL BE THE ONLY OPPORTUNITY TO ASK QUESTIONS.</u>

Each bid shall be accompanied by a bid guaranty in an amount equal to 5 percent of bid amount.

A Performance and Payment Guaranty in an amount equal to 100 percent of total Contract amount must be submitted by the successful Bidder within five (5) calendar days after receipt of notification of award.

The City of Hallandale Beach reserves the right to waive technicalities or irregularities in bids at its discretion or to reject any or all bids.

No Bidder may withdraw his bid within 120 days after the actual date of opening thereof.

Your firm's bid submission shall be valid until such time as City Commission awards a contract as a result of this bid.

0010. MEDIA ADVERTISEMENT LEGAL CLASSIFIED ADVERTISING NEWS/SUN-SENTINEL 333 S.W. 12TH AVENUE DEERFIELD BEACH, FL 33442

Please insert the following Legal Notification in the <u>TUESDAY</u>, <u>JULY 12</u>, <u>2011</u> issue of the NEWS/SUN-SENTINEL. Send certified copy of insertion to the City of Hallandale Beach, General Services/Purchasing Department.

NOTICE TO BID

LEGAL NOTICE IS HEREBY GIVEN sealed bids will be received for **BID #FY2010-2011-006**: **HALLANDALE BEACH ELEVATED WATER TANKS REPAIR**, by the City Clerk's Office, 400 South Federal Highway, Room #242, Hallandale Beach, Florida 33009 for the City of Hallandale Beach, until **MONDAY**, **AUGUST 8**, **2011** @ **11:00 A.M**. At this time bids will be publicly opened and read aloud in the Room 252 or other designated location at City Hall, 400 South Federal Highway, Hallandale Beach, FL 33009.

THE SCOPE OF WORK INCLUDES BUT IS NOT LIMITED TO:

BLUESTEN PARK FOR 250,000 GALLONS ELEVATED WATER TANK. REPLACEMENT OF SWAY RODS (WIND RODS); REPLACEMENT OF RISER RODS; REPLACEMENT OF COLUMN LADDER AND ROOF LADDER; REPLACEMENTS OF ROOF HATCH; REMOVAL OF EXISTING VENT AND REPLACE WITH 24" VENT; PAINTING OF EXTERIOR OF THE TANK.

BEACH TANK FOR 500,000 GALLON ELEVATED WATER TANK: ACCESS TUBE; ROOF VENT; ROOF HATCH; INTERIOR (WET) LADDER; CLIMBING SAFETY DEVICES; OVERFLOW PIPE, INLET PIPE; TANK PENETRATION; PATCH PLATE; ISOLATION VALVES; PLATFORM FLOORS; TANK DRAIN VALVE AND PAINTING OF EXTERIOR OF THE TANK WITH LOGO.

THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIAL, EQUIPMENT, TOOLS, PERSONNEL, AND INCIDENTALS, MAINTENANCE OF TRAFFIC, MOBILIZATION AND TRANSPORTATION WHICH ARE NECESSARY FOR THE PROPER LAYOUT AND COMPLETION OF THE WORK, AS SPECIFIED IN THE BID.

THERE WILL BE ONE (1) MANDATORY PRE-BID CONFERENCE SCHEDULED FOR WEDNESDAY, JULY 20, 2011 AT 11:00 AM AT CITY OF HALLANDALE BEACH, CITY HALL, 400 SOUTH FEDERAL HIGHWAY, CITY COMMISSION CHAMBERS, HALLANDALE BEACH, FL 33009. PLEASE REVIEW THE BID AND BRING YOUR QUESTIONS TO THE MANDATORY CONFERENCE SINCE IT WILL BE THE ONLY OPPORTUNITY TO ASK QUESTIONS. ALL VENDORS THAT RESPOND MUST MEET THE MINIMUM QUALIFICATION REQUIREMENTS SPECIFIED IN THE BID.

MANDATORY SITES VISIT ARE AVAILABLE BY APPOINTMENT ONLY DURING THE WEEK OF MONDAY, JULY 25, 2011 THROUGH FRIDAY, JULY 29, 2011. CONTACT RICHARD LABINSKY, PE. CITY ENGINEER @ (954) 457-3042 OR ABIDEMI AJAYI, E.I., ENGINEER I (954)457-1621

Estimated Budget for this project is \$500,000.00

The City of Hallandale Beach General Services/Purchasing Department prefers that the Bid #FY2010-2011-006 document be obtained through the City of Hallandale Beach Website at www.hallandalebeachfl.gov main page scroll down to button and Select Bids & Contract; or Select: Departments; Select: General Services and Purchasing; Select: Bids Notifications. If your company is downloading a copy of the Bid, Please complete the "Request for Current Bid, RFPs, RFQs Form" for our records or email General Services Office@hallandalebeachfl.gov or fax written requests to (954) 457-1342.

THIS 7THDAY OF JULY, 2011

Indrea les

LUES, ANDREA, DIVISION DIRECTOR

GENERAL SERVICES DEPARTMENT

CITY ADMINISTRATOR AND DEPARTMENTS LIASIONS

1.	CONTRACT ADMINISTRATOR				
	Mark Antonio, City Manager				
	400 S. Federal Highway				
	Hallandale Beach, Florida 33009				
	(954) 457-1300				
2.	ACTING DIRECTOR OF UTILITIES & ENGINEERING				
	Earl King				
	630 NW 2 nd Street				
	Hallandale Beach, Florida 33009				
	(954) 457-1623				
3.	GENERAL SERVICES/PURCHASING DIVISION DIRECTOR				
<u> </u>	Andrea Lues				
	400 S. Federal Highway				
	Hallandale Beach, Florida 33009				
	(954)457-1332				
	(934)437-1332				
4.	GENERAL SERVICES SPECIALIST				
	Joann Wiggins				
	400 S. Federal Highway				
	Hallandale Beach, Florida 33009				
	(954)457-1331				
5.	CITY ENGINEER				
0.	Richard Labinsky, P.E.				
	630 NW 2 nd Street				
	Hallandale Beach, Florida 33009				
	(954) 457-3042				
	ENGINEER I				
6.	Abidemi Ajayi, E.I.				
	630 NW 2 nd Street				
	Hallandale Beach, Florida 33009				
	(954) 457-1621				

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CITY OF HALLANDALE BEACH INVITATION TO BID

NOTICE TO BIDDER: SEALED BIDS WILL BE RECEIVED ON THE DATE, AND AT THE PLACE, AND FOR THE ITEMS LISTED ON THE ATTACHED CITY BID FORMS. BIDS WILL BE PUBLICLY OPENED IN ROOM 252, OR OTHER DESIGNATED AREAS AT CITY HALL, IN THE PRESENCE OF BIDDERS AND CITY OFFICIALS. ALL BIDDERS AND THE PUBLIC ARE INVITED AND ENCOURAGED TO ATTEND THE BID OPENING. AFTER TABULATION AND REVIEW, AND WHEN REQUIRED, BIDS WILL BE PRESENTED TO THE CITY COMMISSION FOR AWARD OF BID AT A COMMISSION MEETING.

PURPOSE OF BID: THE CITY OF HALLANDALE BEACH INTENDS TO SECURE A SOURCE OF SUPPLY FOR ITEM(S) OR SERVICES(S) AT THE LOWEST PRICE AND IN BEST INTEREST OF THE CITY. PROMPT AND CONVENIENT SERVICE AND SHIPMENT BY THE SUPPLIER TO THE CITY. THE CITY RESERVES THE RIGHT TO MAKE AN AWARD TO THE SUPPLIER WHERE THE PRODUCT MEETS THE SPECIFICATIONS, TERMS AND CONDITIONS AND WHERE THE BID IS CONSIDERED TO BEST SERVE THE CITY'S INTEREST.

1. SUBMISSION AND RECEIPT OF BIDS:

- Bids to receive consideration, must be received on or prior to the specified time and date of opening, as designated in the bid
- Unless otherwise specified, bidders MUST use the proposal form(s) or format furnished by the City, failure to do so may be cause for rejection of bid. Removal of any part of the bid items may invalidate bid.
- Proposal having any erasure or corrections MUST be initialed by the bidder in INK.
 Bids shall be signed in INK; all forms shall be typewritten or printed with pen and ink.
- MANDATORY PRE-BID MEETING IS SCHEDULED FOR JULY 20, 2011 AT 11:00 A.M., AT THE CITY OF HALLANDALE BEACH, CITY HALL, 400 SOUTH FEDERAL HIGHWAY, CITY COMMISSION CHAMBERS, HALLANDALE BEACH, FL 33009.

ATTENDANCE AT THE PREBID CONFERENCE IS MANDATORY.

- IF YOU DO NOT ATTEND THE MANDATORY PRE-BID CONFERENCE YOUR BID WILL NOT BE ACCEPTED.
- PLEASE REVIEW THE BID AND BRING YOUR QUESTIONS TO THE MANDATORY CONFERENCE SINCE IT WILL BE THE ONLY OPPORTUNITY TO ASK QUESTIONS.

MINIMUM QUALIFICATION REQUIREMENTS:

- ➤ Bidders must provide evidence that firm is certified and licensed to perform scope of work in the State of Florida.
- Provide a letter on your company's letterhead indicating that firm providing proposal has a minimum of five (5) years of experience providing the services requested in this bid. The firm responding must possess a

BID #FY2010-2011-006

REVISED: 8-8-11

minimum of five (5) years experience under its current business name. Include the name, address, and the telephone number of the Owner Company for which services were provided for each project.

➢ Provide five (5) references of projects of a similar size, scope and complexity to this Bid that have been completed by your company within the last five (5) years. Provide the name of company/owner/business, contact name of individual and his or her role/title, address of the company, and telephone number for which services were performed. The City will contact the names and numbers provided to check these references. Similar projects shall be a minimum of 250,000-gallon tank size and 500,000 − gallon tank size shall include full containment.

Bidders must provide proof of these minimum qualifications with the submission of bid.

• <u>BIDDERS MUST SUBMIT:</u> RESPONSES MUST BE SUBMITTED IN THE FORM OF ONE (1) ORIGINAL AND ONE (1) TRUE AND EXACT CD-ROM COPY (PDF). THE BID PACKAGE MUST CONTAIN AND INCLUDE <u>ALL</u> BID PAGES. REMEMBER TO SIGN, NOTARIZE, AND ATTEST ALL REQUIRED PAGES.

ALL SUBMSSIONS ARE TO:
CITY OF HALLANDALE BEACH
CITY CLERK'S OFFICE
ROOM 242
400 S. FEDERAL HIGHWAY
HALLANDALE BEACH, FLORIDA 33009
BID # FY 2010-2011-006: HALLANDALE BEACH ELEVATED WATER STORAGE
TANKS REPAIR

DATE/TIME OF BID OPENING: PLAINLY MARK ON THE OUTSIDE OF THE ENVELOPE, THE BID NUMBER, PROJECT TITLE AND TIME AND DATE OF BID OPENING. IT WILL BE THE SOLE RESPONSIBILITY OF THE BIDDER TO ENSURE THAT THE BID REACHES THE OFFICE OF THE CITY CLERK, CITY OF HALLANDALE BEACH ON OR BEFORE MONDAY, AUGUST 8, 2011 FRIDAY, AUGUST 12, 2011 @ 11:00 AM.

2. PUBLIC BID DISCLOSURE ACT:

FLORIDA STATUE CHAPTER 218.80: City's permits or fees, including, but not limited to all license fees, permits fees, impact fees, or inspection fees, payable by the contractor to the City are as follows:

 BUILDING PERMITS WILL BE REQUIRED AND PAID FOR BY CONTRACTOR SEE ARICLE 8 – PERMITS, LICENSES AND IMPACT FEES

3. WARRANTIES FOR USAGE:

Whenever a bid is sought, seeking a source of supply for a specified period of time for materials or services, the quantities or usage shown are ESTIMATED ONLY. No guarantee or warranty is given or implied by the City as to the total amount that MAY OR MAY NOT be purchased from any resulting contract(s). These quantities are for bidders

information ONLY and will be used for tabulation and presentation or bid and the City reserves the right to increase or decrease quantities as required.

4. <u>BIDS ACCEPTANCE PERIOD</u>:

Bidder warrants by virtue of bidding the prices, terms and conditions quoted in the bid, bid will remain firm and valid until such time as City Commission awards a contract as a result of this bid.

5. BID PROTEST PERIOD:

A vendor can protest the award of a contract by no later than ten (10) calendar days after approval of contract by City Commission. Please refer to Purchasing Policy #2019.004/R12.

6. **DELIVERY POINT:**

All items shall be delivered F.O.B. destination (i.e., at a specific City of Hallandale Beach address), and delivery costs (if any) will be included in the bid price. Failure to do so may be cause for rejection of the bid.

7. PAYMENT (TERMS):

Payment will be made ONLY after receipt and acceptance of materials/services.

8. BRAND NAMES:

If and whenever in the specifications a brand name, make name of any manufacturer, trade name, or vendor catalog number is mentioned, it is for the purpose of establishing a grade or quantity of materials ONLY. Since the City does not wish to exclude other competition and equal brands or makes, the phrases "OR APPROVED EQUAL" is added. However, it a product other than that specified is bid, it is the vendor's responsibility to name such a product within the bid and to prove to the City that said product is equal to that specified and to submit brochures, samples and/or specifications in detail on item(s) bid. The City shall be the sole judge concerning the merits of bids submitted.

9. SAMPLES AND DEMONSTRATIONS:

Evidence in the form of samples may be requested when required if brand is other than specified. Such samples are to be furnished after the date of the bid opening only, upon requested by City, unless otherwise stated in the bid forms. It samples shall be requested, such samples must be received by the City no later than seven (7) days after formal request is made. When required, the City may request full demonstrations of any unit(s) bid prior to the award of any contract. Samples, when requested, must be furnished free of expense to the City and if not used in testing or destroyed, upon written request will within thirty (30) days of bid award be returned at the bidders expense.

10. QUALITY:

All materials for the manufacture or construction of any supplies, materials, or equipment covered by this bid shall be NEW. The items bid must be new, the latest model, of the best quality and highest grade workmanship.

11. ACCEPTANCE OF MATERIAL:

The item(s) delivered under this proposal shall remain the property of the seller until physical inspection and actual usage of the item(s) and/or services are made and thereafter accepted to the satisfaction of the City and must comply with the terms herein,

and be fully in accord with the specifications and of the highest quality. In the event the material and/or services supplied to the City is found to be defective or does not conform to the specifications, the City reserves the right to cancel the order upon written notice to the seller and return the product(s) to the seller at the seller's expense.

12. VARIATIONS TO THE SPECIFICATIONS:

For purposes of evaluation, bidder MUST indicate any variances from the City specifications, no matter how slight. If variations are not stated in proposal, it will be assumed that the product or service fully complies with City specifications, terms and conditions.

13. DELIVERY:

Time will be of essence for any orders placed as a result of this bid. Purchaser reserves the right to cancel such orders, or any part thereof, without obligation, if delivery is not made at the time specified on the bid proposal form.

14. **DEFAULT PROVISION:**

In case of default by the successful bidder contractor, the City of Hallandale Beach may procure the items or services from other sources and hold the bidder or contractor responsible for any excess cost occasioned or incurred thereby.

15. PRICING:

Prices shall be stated in units of quantity specified in the bid specifications. In case of a discrepancy in computing the total amount of bid. UNIT PRICE quoted will govern.

16. MANUFACTURE'S WARRANTIES:

All bidders shall provide manufacture's warranty on labor and materials prior to award. Such warranty will indicate time period of guarantee. In addition to manufacturer's warranty, bidders will also provide their own warranty on labor and materials.

17. COPYRIGHTS AND/OR PATENT RIGHTS:

Bidder warrants that there has been no violation of copyrights and/or patent rights in the manufacturing producing of selling the goods, shipped or ordered, as a result of this bid and the seller agrees to hold the purchaser harmless from any and all liability, loss, or expense occasioned by any such violation.

18. <u>SAFETY STANDARDS:</u>

The bidder warrants that the service and products to the City conform in all respects to the standards set forth in the Occupational Safety 8 Health Act (O.S.H.A.) and its amendments; failure to comply with this condition will be considered a breach of contract.

19. TRENCH SAFETY ACT:

Bidders must be in compliance with requirements as outlined per Florida Statutes Chapter 553.60 through 553.64.

20. <u>TAXES:</u>

The City of Hallandale Beach, Florida is exempt from any taxes imposed by the State of Florida and/or Federal Government. State Sales Tax Exemption Certificate No. 16-04199765-54C; United States Treasure Department I.R.S. No. 59-6000333, applies and

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appears on each City of Hallandale Beach Purchase Order. Exemption Certificate provided on request.

21. FAILURE TO QUOTE:

If you do not quote, please return the form, "UNABLE TO SUBMIT A BID", stating thereon and request that your name be retained on the City mailing list, otherwise, your name may be removed from the City bid mailing list.

22. MANUFACTURER'S CERTIFICATION:

The City of Hallandale Beach reserves the right to request from bidders, separate manufacturer certificate of all statements made in the proposal.

23. SIGNED BID CONSIDERED AN OFFER:

The signed bid shall be considered an offer on the part of the bidder or contractor, which offer shall be deemed accepted upon approval by the City Commission of the City of Hallandale Beach, Florida and in case of default on the part of the successful bidder or contractor, after such acceptance, the City may take such action as it deems appropriate, including legal action, for damages or specific performance.

24. LIABILITY, INSURANCE, LICENSES AND PERMITS:

Where bidders are required to enter onto City of Hallandale Beach property to deliver materials or perform work or services, as a result of bid award, the bidder will assume full duty, obligation and expense of obtaining all necessary licenses, permits, inspections and insurance, as required. The bidder shall be liable for any damage or loss to the City occasioned by negligence of the bidder (or agent) or any person the bidder has designated in the completion of a contract as a result of the bid.

25. RESERVATION FOR REJECTION AND AWARD:

The City of Hallandale Beach, reserves the right to accept or reject any or all bids or parts of bids, to waive irregularities and technicalities, and to request re bids the required materials. The City also reserves the right to award the contract on such material the City deems will best serve its interests. City further reserves the right to award the contract on a split order basis, lump sum, or individual item basis, or such combination as shall best serve the interest of the City, unless otherwise stated. The City also reserves the right to waive minor variations to specifications (interpretation of minor variations will be made by applicable City Department personnel). In addition, the City reserves the right to cancel any contract by giving thirty (30) days written notice.

26. PROCESSING OF RESPONSES TO BIDS AND PROPOSALS:

Sealed Bids or Proposals by the City of Hallandale Beach shall be opened, evaluated, negotiated and awarded, as applicable, in accordance with State Statutes, the City Charter, Code of Ordinances, any City Administrative Policies. No company and/or firm may discuss procurement for goods or services with members of the City Commission per City Administrative Policy #2019.004/R12 – Purchasing Procedures, City Municipal Code of Ordinances and City Charter. Failure to comply may be cause for rejection of the proposal.

27. PUBLIC RECORDS:

Sealed bids, or replies received by an agency pursuant to a competitive solicitation are exempt from s. 119.07(1) and s. 24(a), Art. I of the State Constitution until such time as

the agency provides notice of an intended decision or until 30 days after opening the bids, proposals, or final replies, whichever is earlier.

If the bidder/proposer believes any of the information contained in his or her response is exempt from the Public Records Law, then the Proposer, must in his or her response, specifically identify the material which is deemed to be exempt and cite the legal authority for the exemption. City's determination of whether an exemption applies shall be final, and bidder/proposer agrees to hold harmless and releases the City, and to defend, indemnify, by Counsel chosen by the City Attorney, the City and City's officers, employees, and agents against any loss or damages incurred by any person or entity as a result of the City's treatment of records as public records.

28. LOCAL PREFERENCE REQUIREMENT:

In the award of this bid and the determination of the lowest, responsive and responsible bidder, the City Commission may award a preference based upon vendors, contractors or subcontractors who are local and whose bid is within five percent (5%) of the apparent lowest bid with a preference in the following order:

- 1) First, to bidders who maintain a place of business within the City of Hallandale Beach limits. Vendor is to submit with the bid package proof of Occupational License issued by the City at least one (1) year prior to bid submission for the appropriate goods, services or construction to be purchased; or
- 2) Second, to bidders who maintain a place of business within the County of Broward. Vendor is to submit with the bid package proof of Occupational License issued by the County at least one (1) year prior to bid submission for the appropriate goods, services or construction to be purchased; or
- 3) Third, to bidders who maintain a place of business with the State of Florida. Vendor is to submit with the bid package proof of Occupational License issued by the State at least one (1) year prior to submission for the appropriate goods, services or construction to be purchased.

29. CONE OF SILENCE:

Per Section 2.3 (e) of the City of Hallandale Beach Code of Ordinances, Lobbyists shall cease all contact and communication with the City Commission forty-eight hours before the date set for a decision on a matter, unless contacted by a City Commissioner. No City board, agency or committee shall have contact forty-eight hours before the date set for a decision on a matter.

30. LOBBYIST REGISTRATION:

Registration:

Every lobbyist shall file the registration with the City Clerk's office on the form provided by the City. Under no circumstances shall a lobbyist working for the City lobby the City Commission.

Annual registration:

Commencing January 1, 2005, and annually thereafter, every lobbyist shall submit to the City Clerk's office a signed statement under oath identifying themselves and their respective principals or clients and/or the party they represented on city matters over the

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past year or in accordance with administrative policy. Such annual disclosure statements shall be submitted on the form provided by the City Clerk's office. A fee of \$100.00 shall be paid to the city for annual lobbyist registration.

31. QUALIFICATIONS AND EXPERIENCE:

Provide at least five (5) references familiar with your work experience and expertise in this area. Please provide the name, address and phone number of each reference.

32. SILENCE OF SPECIFICATIONS:

The apparent silence of this specification and any supplemental specifications as to any details or the omission from it of a detailed description concerning any point will be regarded as meaning that only the best commercial practices are to prevail, and that only materials of first quality and correct type, size and design are to be used. All workmanship is to be first quality. All interpretations of this specification shall be made upon the basis of this statement.

33. SCRUTINIZED COMPANIES:

The City, entering into a contract for goods or services of \$1 million or more, entered into or renewed on or after July 1, 2011, can terminate such contract at the option of the City if the company awarded the contract is found to have submitted a false certification or has been placed on the Scrutinized Companies with Activities in Sudan List or Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List.

34. <u>INSURANCE REQUIREMENTS FORM CONTRACT</u>: PAGES 51 THROUGH PAGES 53: ARTICLE 5.

35. ENCLOSURES/ATTACHMENT REQUIREMENTS:

√	ONE (1) COMPLETE SET OF GENERAL INSTRUCTIONS
√	MEDIA ADVERTISING
√	DRUG-FREE WORKPLACE FORM
√	BID/TENDER FORM
✓	SCHEDULE OF BID PRICES
√	PUBLIC ENTITY CRIMES FORM
√	SUPPLEMENT TO BID/TENDER FORM
√	FORM CONTRACT – INCLUDING INSURANCE REQUIREMENTS
√	TECHNICAL SPECIFICATIONS

36. **BID GUARANTEE AND BOND REQUIREMENTS:**

✓	a) Bid Guarantee. Each bidder shall submit with his/her bid, a bid					
	guarantee in the form of a Certified Check, Cashier's Check, Bid					
	Bond in the amount of five percent (5%) of the total bid price,					
	payable to the City of Hallandale Beach. Upon award of					
	bid/contract, the bid guarantee will be returned to unsuccessful					
	bidder(s) within ten (10) work days after award.					
✓	b) Performance Bonds and Payment Bond Form: The bidder to whom					
	award is made shall, within five (5) calendar days after the date of					
	award, furnish a performance bond with good and sufficient surety					
	acceptable to the City of Hallandale Beach.					
	Performance Bond: The penal sum of the performance bond					
	shall equal one hundred percent (100%) of the contract price.					

0100. INSTRUCTIONS TO BIDDERS

1. <u>General:</u> The following instructions are given for the purpose of guiding Bidders in properly preparing their bids. These instructions have equal force and weight with other portions of the Bid Project Document and strict compliance is required with all the provisions contained herein.

2. Minimum Qualification Requirements:

- ➤ Bidders must provide evidence that firm is certified and licensed to perform scope of work in the State of Florida.
- Provide a letter on your company's letterhead indicating that firm providing proposal has a minimum of five (5) years of experience providing the services requested in this bid. The firm responding must possess a minimum of five (5) years experience under its current business name. Include the name, address, and the telephone number of the Owner Company for which services were provided for each project.
- Provide five (5) references of projects of a similar size, scope and complexity to this Bid that have been completed by your company within the last five (5) years. Provide the name of company/owner/business, contact name of individual and his or her role/title, address of the company, and telephone number for which services were performed. The City will contact the names and numbers provided to check these references. Similar projects shall be a minimum of 250,000-gallon tank size and 500,000 gallon tank size shall include full containment.

Bidders must provide proof of these minimum qualifications with the submission of bid.

- 3. Purpose: The City of Hallandale Beach, Florida (City) is seeking Bids from qualified firms, hereinafter referred to as the Contractor, to paint and refurbish the Bluesten Park 250,000 Gallon Elevated Water Tank and the Beach 500,000 Gallon Elevated Tank for the City, in accordance with the terms, conditions, and specifications contained in this Bid.
- 4. <u>Scope of Work:</u> The work set forth within this bid document includes the furnishing of all labor, materials, equipment, services and incidentals for the <u>Bluesten Park Elevated Water Storage Tanks Repair</u> and <u>Beach Elevated Storage Tanks Repair</u> as shown in the technical specification documents and the attached drawings.
- 5. <u>Schedule of Work Hours</u>: **Normal Business Hours (8 am to 5 pm weekdays)**

- 6. <u>Location of Work:</u> Hallandale Beach Elevated Water Storage Tanks are located at Bluesten Park 501 SE 1st Avenue and Beach 2801 East Hallandale Beach Boulevard in Hallandale Beach, Florida 33009.
- 7. <u>Examination of Bid Project Document and Site:</u> It is the responsibility of each Bidder before submitting a Bid, to:
 - 7.1. Examine the Bid Project Document thoroughly,
 - 7.2. Visit the site to become familiar with local conditions that may affect costs, progress, performance or furnishing of the work,
 - 7.3. Consider federal, state and local laws and regulations that may affect cost, progress, performance or furnishing of the work,
 - 7.4. Study and carefully correlate Bidder's observations with the Bid Project Document, and
 - 7.5. Notify City of all conflicts, errors or discrepancies in the Bid Project Document.

The submission of a Bid will constitute an incontrovertible representation by Bidder that Bidder has complied with the above requirements and that without exception the Bid is premised upon performing and furnishing the work required by the contract documents and such means, methods, techniques, sequences of procedures of construction as may be indicated or required by the contract documents, and that the contract documents are sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance and furnishing of the work.

- 8. <u>Interpretations:</u> All questions about the meaning or intent of the Bid Project Document are to be directed to the CITY. Interpretations or clarifications considered necessary by the CITY in response to such questions will be issued by Addenda mailed or delivered to all parties recorded by CITY as having received the Bidding Documents.
- 9. <u>Submitting Bids:</u> All bids must be received at the City Clerk's Office, City of Hallandale Beach, 400 South Federal Highway, Room 242, Hallandale Beach, Florida 33009, before the time and date specified for bid opening, enclosed in a sealed envelope, legibly marked on the outside.

BID CONTRACT NO. FY2010-2011-006: HALLANDALE BEACH ELEVATED WATER STORAGE TANKS REPAIRS FOR THE PROJECT [A] BLUESTEN PARK AND PROJECT [B] BEACH TANK.

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- 10. <u>Printed Form of Bid:</u> The BID TENDER FORM #00300 must be signed and acknowledged by the Bidder in accordance with the directions on the bid form.
- 11. Bid Guaranty: All bids shall be accompanied by either a bid bond executed by a Surety company meeting the qualifications for Surety companies as specified in item 36 of the City of Hallandale Beach Invitation to bid or by cash, money order, certified check, cashier's check, irrevocable letter of credit (FORM 00310), treasurer's check or bank draft of any national or state bank (United States), in an amount equal to 5 percent of the total bid price, payable to the City of Hallandale Beach and conditioned upon the successful Bidder executing the Contract and providing the required Performance and Payment Guaranty and evidence of insurance within five (5) calendar days after notification of award of the Contract. A PERSONAL CHECK OR A COMPANY CHECK OF A BIDDER SHALL NOT BE DEEMED VALID BID GUARANTY. Guaranty of the successful Bidder shall be forfeited to the City of Hallandale Beach not as a penalty, but as liquidated damages for the cost and expense incurred should said Bidder fail to provide the required Performance and Payment Guaranty and Insurance Certificate, or fail to comply with any other requirements set forth herein. Bid Guaranties of the unsuccessful Bidders will be returned after award of Contract.

Qualification of Surety: For projects of \$500,000.00 or less, the CITY may accept a Bid Bond and Performance and Payment Bond (Performance Bond and Payment Bond) from a surety company which has twice the minimum surplus and capital required by the Florida Insurance Code at the time the invitation to bid is issued, if the surety company is otherwise in compliance with the provisions of the Florida Insurance Code, and if the surety company holds a currently valid Certificate of Authority issued by the United States Department of the Treasury under Section 9304 to 9308 of Title 31 of the United States Code. The Certificate and Affidavit so certifying (FORM 00622) should be submitted with the Bid Bond and also with the Performance and Payment Bond.

More stringent requirements of any grantor agency are set forth within the Supplemental Conditions. If there are no more stringent requirements, the provisions of this section shall apply.

12. Acceptance or Rejection of Proposals: The CITY reserves the right to reject any or all bids. Reasonable efforts will be made to promptly award the Contract after bid opening date. A Bidder may withdraw his/her bid in writing To: City of Hallandale Beach, General Services/Purchasing Department, 400 South Federal Highway, Hallandale Beach, Florida 33009. ATTENTION: BID #2010-2011-006 WITHDRAWAL.

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Time for Executing Contract and Providing Required Documentation: Any Bidder whose bid is accepted shall execute the contract and furnish the required Performance and Payment Guaranty (FORM 00609) and Certificate(s) of Insurance within five (5) calendar days after receipt of notice that the contract has been awarded to such Bidder. Upon the failure of the Bidder to execute the contract and provide the required Performance and Payment Guaranty and Certificate(s) of Insurance within five (5) calendar days the Bidder shall pay to the City the sum of \$500.00 for each calendar day beyond the five (5) calendar days as liquidated damages. By execution of this contract, CONTRACTOR agrees that said amount of liquidated damages shall be set forth in a change order and deducted from the first partial payment made to the CONTRACTOR for the work done under this contract.

If the Bidder fails to execute the contract and furnish the required Performance and Payment Guaranty and Certificate(s) of Insurance by the 30th day after the notice of award, the Bidder shall forfeit the Bid Guaranty.

14. Contract Time:

TIME FRAME FOR COMPLETION OF PROJECT:

TIME IS OF THE ESSENCE FOR THIS PROJECT. THE WORK SHALL BE SUBSTANTIALLY COMPLETED WITHIN 90 CALENDAR DAYS (FOR EACH TANK) FROM THE PROJECT INITIATION DATE SPECIFIED IN THE NOTICE TO PROCEED AND COMPLETED AND READY FOR FINAL PAYMENT WITHIN 120 CALENDAR DAYS FROM THE PROJECT INITIATION DATE SPECIFIED IN THE NOTICE TO PROCEED.

15. **Method of Contract Award**

This Bid consists of two (2) project parts for bidding: Project A, Project B or Project C which consists of scope of work to be completed in the consecutive order of completion of Project A and then completion of Project B. The City may award a contract to one or more firms being the lowest responsive bidder to Project [A] or Project [B] or Project [C] in the best interest of the City. Therefore, award of each project may result in the City awarding one or more firms.

- 16. <u>Liquidated Damages:</u> Provisions for liquidated damages, if any, are set forth in Article 2 of the Contract.
- 17. <u>Determination of Award:</u> Except where the CITY exercises the right reserved herein to reject any or all bids and subject to the restrictions stated hereinabove, the contract shall be awarded by the CITY to the responsible Bidder who has submitted either the lowest responsive bid or the lowest responsive bid on the base bid including such alternates as the CITY determines to be in its own best interests depending upon whichever is applicable to the particular bid. These Contract Documents may include additional terms and conditions required by federal or state grantor agencies. In the event of any discrepancy between the grantor agency's

- regulations and the CITY'S regulations, the more stringent regulations concerning the determination for award shall apply.
- 18. <u>Price:</u> The price is to include the furnishing of all labor, materials, equipment including tools, services, permit fees and applicable taxes, necessary or proper for the completion of the work except as may be otherwise expressly provided in the Bid Project Document.
- 19. <u>Availability of Funds:</u> The obligation of the City of Hallandale Beach under the award/contract is subject to the availability of funds in accordance with the annual budget.
- 20. <u>Prices Bid:</u> Fixed prices are requested for items listed on the Scheduled of Bid Prices for Project [A] Bluesten Park, Project [B] Beach Tank, Project [C] Bluesten Park and Beach Tank <u>Consecutively</u>, for one (1) year.
 - <u>Contract Price:</u> No price increase will be accepted during the initial contract period.
- 21. <u>Postponement of Date for Presenting and Opening of Bids:</u> The CITY reserves the right to postpone the date for receipt and opening of bids and will make a reasonable effort to give at least seven days written notice of any such postponement to each prospective Bidder.
- 22. <u>Qualifications of Bidders:</u> Bids shall be considered only from firms normally engaged in performing the type of work specified within the Bid Project Document. Bidder must have adequate organization, facilities, equipment, and personnel to ensure prompt and efficient service to the CITY.

In determining a Bidder's responsibility and ability to perform the contract, the CITY has the right to investigate the financial condition, experience record, personnel, equipment, facilities, and organization of the Bidder.

At the time of submitting the bid, Bidder must be in compliance with Chapter 9 of the Broward County Code of Ordinances and the laws of the State of Florida as they relate to Certificates of Competency. Each Bidder should submit with the bid a copy of his or her Certificate of Competency and/or state registration. If your firm does not have the certificate of competency you can Go to Broward County Ordinances link and click Chapter 9 for requirements.

http://www.municode.com/resources/gateway.asp?pid=10288&sid=9

The Division Director of the General Services/Purchasing Department shall determine whether the evidence of bidder responsiveness is satisfactory and will make awards only when such evidence is deemed satisfactory.

The City of Hallandale Beach reserves the right to reject bids when evidence indicates Bidder's inability to perform the contract.

23. Addenda and Modifications: All addenda and other modifications to the documents made prior to the time and date of bid opening shall be issued as separate documents identified as changes to the Bid Project Document. CITY shall make reasonable efforts to issue addenda within seven days prior to bid opening.

If any addenda are issued, the City will attempt to notify prospective Bidders. Addenda to this solicitation will be posted on the Division's webpage http://fl-hallandalebeach2.civicplus.com/index.aspx?nid=417. It is the Bidder's responsibility to check the website or contact the General Services/Purchasing Department prior to the proposal submittal deadline to ensure that the Bidder has a complete bid package.

24. Occupational Health and Safety: The CONTRACTOR and Subcontractors shall comply with the provisions of the Occupational Safety and Health Standards, promulgated by the Secretary of Labor under the "Occupational Safety and Health Act of 1970".

The CONTRACTOR shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the work. The CONTRACTOR shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:

- All employees on the work and other persons who may be affected thereby.
- 2. All the work and all materials or equipment to be incorporated therein, whether in storage on or off the site.
- Other property at the site or adjacent thereto, including trees, shrubs, lawns, walks pavements roadways, structures and utilities not designated for removal, relocating or replacement in the course of construction.

The CONTRACTOR shall designate a responsible member of his organization at the site whose duty shall be the prevention of accidents. This person shall be the CONTRACTOR'S Superintendent unless otherwise designated in writing by the CONTRACTOR to the CITY ENGINEER.

Until acceptance of the work by the CITY, it shall be under the charge and in care of the CONTRACTOR and he shall take every necessary precaution against injury or damage to the work by action of the

elements or from the execution or from the non-execution of the work. The CONTRACTOR shall rebuild, restore and make good, at his own

expense, all injuries or damages to any portion of the work occasioned by any of the above causes before its completion and acceptance.

25. Retainage: The Contractor agrees that ten percent (10%) of monies earned by Contractor shall be retained by City until fifty percent (50%) completion of the project. After 50% completion of the project and prior to Final Payment, City shall retain five percent (5%) of monies earned by Contractor. The City may retain amounts greater than those set forth above that are the subject of a good faith dispute pursuant to Federal Statute 255.078 (6), the subject of a claim brought pursuant to Section 255.05, Florida Statutes, or otherwise the subject of a claim or demand by the City or Contractor.

26. <u>Vendor Note:</u> State of Florida Divisions of Corporation(Sunbiz): If the Company President does not sign the (Bid) Contract, , there must be a Secretary's Certificate Form provide to the City of Hallandale Beach, Florida indicating designee signing, has the authority to sign.

All legal actions arising out of or connected with this Agreement must be instituted in the Circuit Court of Broward County, Florida. The laws of the State of Florida shall govern the interpretation and enforcement of this agreement, without regard to Florida's conflict of law's principles. Trail by jury is hereby waived by the parties.

00130. **DRUG-FREE WORKPLACE FORM**

The unde	ersigned vendor in accordance with Florida Statute 287.087	
Hereby c	certified that d (Name of Business)	oes:
1.	Publish a statement notifying employees that the unlawful manudistribution, dispensing, possession, or use of a controlled substrohibited in the workplace and specifying the actions that will be against employees for violations of such prohibition.	ance is
2.	Inform employees about the dangers of drug abuse in the workp business's policy of maintaining a drug-free workplace, any avail counseling, rehabilitation, and employee assistance programs, a penalties that may be imposed upon employees for drug abuse	lable drug and the
3.	Give each employee engaged in providing the commodities or conservices that are under bid a copy of the statement specified in section (1).	
4.	In the statement specified in subsection (1), notify the employee condition of working on the commodities or contractual services under bid, the employee will abide by the terms of the statement notify the employer of any conviction of or plea of guilty or nolo to, any violation of Chapter 1893 or of any controlled substance United States or any state, for a violation occurring in the workp later than five (5) days after such conviction.	that are and will contendere law of the
5.	Impose a sanction on, or require the satisfactory participation in abuse assistance or rehabilitation program if such is available in employee's community, by any employee who is so convicted.	
6.	Make a good faith effort to continue to maintain a drug-free work through I implementation of this section.	place
	son authorized to sign the statement, I certify that this firm complie e requirements.	s fully with
 Date	Bidder's Signature	

00300. BID/TENDER FORM
SUBMITTED BY:
DATE:
The undersigned, as Bidder, hereby declares that the only persons interested in this bid as principal are named herein and that no person other than herein mentioned has any interest in this bid or in the Contract to be entered into; that this bid is made without connection with any other person, firm, or parties making a bid; and that it is, in all respects, made fairly and in good faith without collusion or fraud.
The Bidder further declares that he has examined the site of the work and informed himself fully of all conditions pertaining to the place where the work is to be done; that he has examined the Bid Project Document and all addenda thereto furnished before the opening of the bids, as acknowledged below; and that he has satisfied himself about the work to be performed; and that he has submitted the required Bid Guaranty and the Small Disadvantaged Business Enterprise forms (if required) and all other required information with the bid.
The Bidder agrees, if this bid is accepted, to contract with the City of Hallandale Beach, a political subdivision of the State of Florida, on the form attached hereto, to furnish all necessary materials, equipment, machinery, tools, apparatus, means of transportation, and all labor necessary to construct and complete within the time limits specified the work covered by this bid and other Contract Documents for the project entitled: BID #FY2010-2011-006: HALLANDALE BEACH ELEVATED WATER STORAGE TANKS REPAIR.
The Bidder also agrees to furnish the required Performance and Payment guaranty for not less than the total bid price, and to furnish the required Certificate(s) of Insurance.
The undersigned further agrees that the Bid Guaranty accompanying the bid shall be forfeited if he fails to execute said Contract, or fails to furnish the required Performance and Payment guaranty or fails to furnish the required Certificate(s) of Insurance within 15 calendar days after being notified of the award of the Contract.
In the event of arithmetical errors, the Bidder agrees that these errors are errors which may be corrected by the CITY. In the event of a discrepancy between the price bid in figures and the price bid in words, the price in words shall govern. Bidder agrees that any unit price listed in the bid is to be multiplied by the stated quantity requirements in order to arrive at the total.
The Bidder certifies that no principals or corporate officers of the firm were principals or corporate officers in another firm at the time such other firm was suspended within the last two years from doing business with CITY; except as stated below:

ADDENDUM ACKNOWLEDGEMENT is hereby made of the following addenda (identified by number) received since issuance of the Bid Project Document:

	ADDENDUM NUMBE	R	DATE ISSUED		
\ tto ob o	d is a Did Dand for the a	ım of			
Allache	d is a Bid Bond for the si	JIII OI			
			Dollars (\$).
					/-
Γhe Bid	der shall acknowledge th	nis bid by s	signing and completing	the space	es provided
elow.			3 3 3 3 3 4 3 5		
Nar	ne of Bidder:				
Add	lress:				
City					
Sta	te:				
Zip	Code:				
	ephone Number:				
	cial Security No.				
or	, and the second				
Fed	leral ID Number:				
Bra	dstreet No.:				
(if a	pplicable)				
	,				
f a part	nership, name and addre	esses of pa	artners:		
		•			

(Sign below if not incorporated)

	(Type or Print Name of Bidder)
WITNESSES:	
	(Signature)
	(Type or Print Name of Signed Above)
(Sign below if incorporated)	
	(Type or Print Name of Corporation)
ATTEST:	
Secretary	
	(Signature and Title)
(CORPORATE SEAL)	
	(Type or Print Name Signed Above)
Incorporated under the laws of the State of	: (Signature)
	(Type or Print Name of Signed Above)

SCHEDULED OF BID PRICES

PROJECT [A]

VENDOR SHALL HOLD THE UNIT BID PRICES FIRM THROUGHOUT THE CONTRACT PERIOD

BLUESTEN PARK ELEVATED WATER TANK 250,000 GALLON TANK

CONTRACT AWARD:

This Bid consists of two (2) project parts for bidding: Project A, Project B or Project C which consists of scope of work to be completed in the consecutive order of completion of Project A and then completion of Project B. The City may award a contract to one or more firms being the lowest responsive bidder to Project [A] or Project [B] or Project [C] in the best interest of the City. Therefore, award of each project may result in the City awarding one or more firms.

ITEM No. DESCRIPTION				UNIT	TOTAL
			QTY	PRICE	PRICE
1	Prepare and Repaint Exterior Surfaces	LS	1		
2	Spot Prepare and Spot Coat Interior Surfaces	LS	1		
3	Replace inlet pipe Section	LS	1		
4	Replace Shell and Roof Ladder	LS	1		
5	Replace Column Ladder	LS	1		
6	Install Climbing Safety Devices on New Ladders	LS	1		
7	Install a Ladder Gate on Column Ladder	LS	1		
8	Install New Roof Vent LS 1				
9	Extend Overflow to Ground Level	LS	1		
10	Replace Roof Hatch	LS	1		
11	Replace 5 Sway Rods	LS	1		
12	Replace All Riser Rods	LS	1		
13	Repair Column Anchor	LS	1		
14	Install Antenna Cable Mount	LS	1		
15	Mobilization	LS	1		
16	City Building Permit Fee Budget	LS	1	\$5,000.00	\$5,000.00
\$25.00 IS ADDED FOR INSURANCE INDEMNIFICATION FOR THE CITY OF HALLANDALE BEACH. THIS IS THE ONLY AMOUNT ALLOWED FOR THIS ITEM.					\$25.00
TOTAL FOR PROJECT – PROJECT [A]					

BIDDER TO SPECIFY ANY VARIATION TO THE REQUIRED SERVICES AND CONTRACT, NO MATTER HOW SLIGHT. IF NONE, PLEASE SO STATE:

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THE CITY RESERVES THE RIGHT TO INCREASE OR DECREASE THE ITEM QUANTITIES FOR PROJECT TO MEET ITS AVAILABLE BUDGET USING THE **UNIT PRICES PROVIDED ABOVE.**

SCHEDULED OF BID PRICES [REVISED 8-8-11]

PROJECT [B] WITH OPTION 1A

VENDOR SHALL HOLD THE UNIT BID PRICES FIRM THROUGHOUT THE **CONTRACT PERIOD**

BEACH ELEVATED WATER TANK 500,000 GALLON TANK

CONTRACT AWARD:

This Bid consists of two (2) project parts for bidding: Project A, Project B or Project C which consists of scope of work to be completed in the consecutive order of completion of Project A and then completion of Project B. The City may award a contract to one or more firms being the lowest responsive bidder to Project [A] or Project [B] or Project [C] in the best interest of the City. Therefore, award of each project may result in the City awarding one or more firms.

ITEM No. DESCRIPTION				UNIT	TOTAL
		UNIT	QTY	PRICE	PRICE
1A	1A Removal of Existing Coating by UHP Water Blast and Apply 3 full coats of		1		
	paint				
2	Prepare and Coat Interior Surfaces	LS	1		
3	3 Replace Upper Portion of Access Tube		1		
4	Install New Roof Vent	LS	1		
5	Replace Interior (Wet) Ladder	LS	1		
6	Replace Roof Hatch	LS	1		
7	'		1		
8	Replace Overflow pipe	LS	1		
9			1		
	Weld				
10	Install Patch Plate on Pillar	LS	1		
11	Mobilization LS 1				
12	City Building Permit Fee Budget	LS	1	\$5,000.00	\$5,000.00
\$25.00 IS ADDED FOR INSURANCE INDEMNIFICATION FOR THE CITY					\$25.00
OF HALLANDALE BEACH. THIS IS THE ONLY AMOUNT ALLOWED					
FOR THIS ITEM.					
TOTAL FOR PROJECT – PROJECT [B] WITH OPTION 1A					

BIDDER TO SPECIFY ANY VARIATION TO THE REQUIRED SERVICES, NO MATTER HOW SLIGHT. IF NONE, PLEASE SO STATE:

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THE CITY RESERVES THE RIGHT TO INCREASE OR DECREASE THE ITEM QUANTITIES FOR PROJECT TO MEET ITS AVAILABLE BUDGET USING THE UNIT PRICES PROVIDED ABOVE.

BID #FY2010-2011-006 REVISED: 8-8-11

SCHEDULED OF BID PRICES [REVISED 8-8-11] PROJECT [B] WITH OPTION 1B

VENDOR SHALL HOLD THE UNIT BID PRICES FIRM THROUGHOUT THE CONTRACT PERIOD

BEACH ELEVATED WATER TANK 500,000 GALLON TANK

CONTRACT AWARD:

This Bid consists of two (2) project parts for bidding: Project A, Project B or Project C which consists of scope of work to be completed in the consecutive order of completion of Project A and then completion of Project B. The City may award a contract to one or more firms being the lowest responsive bidder to Project [A] or Project [B] or Project [C] in the best interest of the City. Therefore, award of each project may result in the City awarding one or more firms.

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ITEM No.	DESCRIPTION			UNIT	TOTAL
		UNIT	QTY	PRICE	PRICE
1B	Spot Prepare, Spot Prime and Full	LS	1		
	Top Coat				
2	Prepare and Coat Interior Surfaces	LS	1		
3	Replace Upper Portion of Access Tube	LS	1		
4	Install New Roof Vent	LS	1		
5	Replace Interior (Wet) Ladder	LS	1		
6	Replace Roof Hatch	LS	1		
7			1		
8	Replace Overflow pipe LS 1				
9			1		
10	Install Patch Plate on Pillar	LS	1		
11	Mobilization	LS	1		
12	City Building Permit Fee Budget	LS	1	\$5,000.00	\$5,000.00
\$25.00 IS ADDED FOR INSURANCE INDEMNIFICATION FOR THE CITY OF HALLANDALE BEACH. THIS IS THE ONLY AMOUNT ALLOWED FOR THIS ITEM.			\$25.00		
TOTAL FO	OR PROJECT - PROJECT [B] WITH OP	TION 1B			

BIDDER TO SPECIFY ANY VARIATION TO THE REQUIRED SERVICES, NO MATTER HOW SLIGHT. IF NONE, PLEASE SO STATE:

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THE CITY RESERVES THE RIGHT TO INCREASE OR DECREASE THE ITEM QUANTITIES FOR PROJECT TO MEET ITS AVAILABLE BUDGET USING THE **UNIT PRICES PROVIDED ABOVE.**

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BID #FY2010-2011-006 REVISED: 8-8-11

SCHEDULED OF BID PRICES C [A & B] CONSECUTIVELY [REVISED 8-8-11] VENDOR SHALL HOLD THE UNIT BID PRICES FIRM THROUGHOUT THE 1St YEAR OF CONTRACT PERIOD

PROJECT [A] AND PROJECT [B] CONSECUTIVELY WITH OPTION 15A

BLUESTEN PARK ELEVATED WATER TANK 250,000 GALLON TANK (1ST) AND BEACH ELEVATED WATER TANK 500,000 GALLON TANK(2ND)

ITEM	DESCRIPTION BLUSTEN PARK			UNIT	TOTAL
No.		UNIT	QTY	PRICE	PRICE
1	Prepare and Repaint Exterior Surfaces	LS	1		
2	Spot Prepare and Spot Coat Interior Surfaces	LS	1		
3	Replace inlet pipe Section	LS	1		
4	Replace Column Ladder	LS	1		
5	Install Climbing Safety Devices on New Ladders	LS	1		
6	Replace Shell and Roof Ladder	LS	1		
7	Install a Ladder Gate on Column Ladder	LS	1		
8	Install New Roof Vent	LS	1		
9	Extend Overflow to Ground Level	LS	1		
10	Replace Roof Hatch	LS	1		
11	Replace 5 Sway Rods	LS	1		
12	Replace All Riser Rods	LS	1		
13	Repair Column Anchor LS 1				
14	Install Antenna Cable Mount	LS	1		
	SUB-TOTAL PROJECT [A]				
	DESCRIPTION BEACH TANK				
15A	Removal of Existing Coating by UHP Water Blast and Apply 3 full coats of paint	LS	1		
16	Prepare and Coat Interior Surfaces	LS	1		
17	Replace Upper Portion of Access Tube	LS	1		
18	Install New Roof Vent	LS	1		
19	Replace Interior (Wet) Ladder	LS	1		
20	Install climbing safety Device on New Ladder	LS	1		
21	Replace Roof Hatch	LS	1		
22	Replace Overflow pipe	LS	1		
23	Repair Inlet Pipe Penetration Weld	LS	1		
24	Install Patch Plate on Pillar	LS	1		
25	Mobilization	LS	1		
	SUB-TOTAL PROJECT [B]				
26	City Building Permit Fee Budget	LS	1	10,000.00	10,000.00

\$25.00 IS ADDED FOR INSURANCE INDEMNIFICATION FOR THE CITY OF HALLANDALE BEACH. THIS IS THE ONLY AMOUNT ALLOWED FOR THIS ITEM.	\$25.00
TOTAL FOR PROJECTS: [A] AND [B] CONSECUTIVELY: WITH OPTION 15A	
BIDDER TO SPECIFY ANY VARIATION TO THE REQUIRED SERVICES, NO MATTER HOW SLIGHT. IF NONE, PLEASE SO STATE:	

THE CITY RESERVES THE RIGHT TO INCREASE OR DECREASE THE ITEM QUANTITIES FOR PROJECT TO MEET ITS AVAILABLE BUDGET USING THE UNIT PRICES PROVIDED ABOVE.

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BID #FY2010-2011-006 REVISED: 8-8-11

SCHEDULED OF BID PRICES C [A & B] CONSECUTIVELY [REVISED 8-8-11] VENDOR SHALL HOLD THE UNIT BID PRICES FIRM THROUGHOUT THE 1St YEAR OF CONTRACT PERIOD

PROJECT [A] AND PROJECT [B] CONSECUTIVELY WITH OPTION 15B

BLUESTEN PARK ELEVATED WATER TANK 250,000 GALLON TANK (1ST) AND BEACH ELEVATED WATER TANK 500,000 GALLON TANK(2ND)

ITEM	DESCRIPTION BLUSTEN PARK			UNIT	TOTAL
No.		UNIT	QTY	PRICE	PRICE
1	Prepare and Repaint Exterior Surfaces	LS	1		
2	Spot Prepare and Spot Coat Interior Surfaces	LS	1		
3	Replace inlet pipe Section	LS	1		
4	Replace Column Ladder	LS	1		
5	Install Climbing Safety Devices on New Ladders	LS	1		
6	Replace Shell and Roof Ladder	LS	1		
7	Install a Ladder Gate on Column Ladder	LS	1		
8	Install New Roof Vent	LS	1		
9	Extend Overflow to Ground Level	LS	1		
10	Replace Roof Hatch	LS	1		
11	Replace 5 Sway Rods	LS	1		
12	Replace All Riser Rods	LS	1		
13	Repair Column Anchor	LS	1		
14	Install Antenna Cable Mount	LS	1		
	SUB-TOTAL PROJECT [A]				
	DESCRIPTION BEACH TANK				
15B	Spot Prepare, Spot Prime and Full Top Coat	LS	1		
16	Prepare and Coat Interior Surfaces				
17	Replace Upper Portion of Access Tube	LS	1		
18	Install New Roof Vent	LS	1		
19	Replace Interior (Wet) Ladder	LS	1		
20	Install climbing safety Device on New Ladder	LS	1		
21	Replace Roof Hatch	LS	1		
22	Replace Overflow pipe	LS	1		
23	Repair Inlet Pipe Penetration Weld	LS	1		
24	Install Patch Plate on Pillar	LS	1		
25	Mobilization	LS	1		
	SUB-TOTAL PROJECT [B]				
26	City Building Permit Fee Budget	LS	1	10,000.00	10,000.00
\$25.00 IS	ADDED FOR INSURANCE INDEMNIFIC	ATION FO	OR THE C	CITY	

OF HALLANDALE BEACH. THIS IS THE ONLY AMOUNT ALLOWED	\$25.00
FOR THIS ITEM.	
TOTAL FOR PROJECTS: [A] AND [B] CONSECUTIVELY: WITH	
OPTION 15B	

BIDDER TO SPECIFY ANY VARIATION TO THE REQUIRED SERVICES, NO MATTER HOW SLIGHT. IF NONE, PLEASE SO STATE:

THE CITY RESERVES THE RIGHT TO INCREASE OR DECREASE THE ITEM QUANTITIES FOR PROJECT TO MEET ITS AVAILABLE BUDGET USING THE **UNIT PRICES PROVIDED ABOVE.**

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00310. <u>BID BOND</u>

BID BOND WILL BE INSERTED HERE.

00320. PUBLIC ENTITY CRIME FORM

NOTICE TO BIDDERS

SWORN STATEMENT PURSUANT TO SECTION 287.133(2) (a), FLORIDA STATUTES, PUBLIC ENTITY CRIME INFORMATION

"A person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a bid, proposal, or reply on a contract to provide any goods or services to a public entity; may not submit a bid, proposal, or reply on a contract with a public entity for the construction or repair of a public building or public work; may not submit bids, proposals, or replies on leases of real property to a public entity; may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity; and may not transact business with any public entity in excess of the threshold amount provided in s. 287.017 for CATEGORY TWO for a period of 36 months following the date of being placed on the convicted vendor list."

Ву:		
Title:		
Signed and Sealed:	day of	2011

00400. SUPPLEMENT TO BID/TENDER FORM

(Questionnaire should be submitted with bid)

QUESTIONNAIRE

The undersigned guarantees the truth and accuracy of all statements and the answers contained herein.

1.	How many years has your organization been in business as a Contractor?
2.	What is the last project of this nature that you have completed?
3.	Have you ever failed to complete the work awarded to you? If so, where and why?
4.	Provide three (3) references of projects of a similar size, scope and complexity that have been completed by your company with the last five (5) years. Provide the name of company/owner/business, contact name of individual and his role/title, address of the company, and telephone number.

5.				tracts in progress a ist the information f	
	Name of Project	Owner	Total Contract Value	Contracted Date of Completion	% of Completion To Date
-					
-		(Continue lie	t on inpart shoot	if necessary)	
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6.			epresentative insp lan for its perfori	pected the propose mance?	project and does
7.	each subcon	tractor(s) that v nount and the v	vill perform work i	o, give details includ n excess of ten pero erformed by each s	cent (10%) of
			_		

The foregoing list of subcontractor(s) may not be amended after award of the contract without the prior written approval of the Contract Administrator, whose approval shall not be unreasonably withheld.

8.	What equipment do you own that is available for the work?
9.	What equipment will you purchase for the proposed work?
10.	What equipment will you rent for the proposed work?

11.	State the name of your proposed project manager and give details of his or her qualifications and experience in managing similar jobs.
12.	State the true, exact, correct and complete name of the partnership, corporation or trade name under which you do business and the address of the place of business. (If a corporation, state the name of the president and secretary. If a trade name, state the names of the individuals who do business under the trade name).
12.1	The correct name of the Bidder is
12.2	The business is a (Sole Proprietorship); (Partnership); (Corporation).
12.3	The address of principal place of business is
12.4	The names of the corporate officers, or partners, or individuals doing business under a trade name, are as follows:

12.5.	List all organizations which were predecessors to Bidder or in which the
	principals or officers of the Bidder were principals or officers.
12.6	List and describe all bankruptcy petitions (voluntary or involuntary) which have
	been filed by or against the Bidder, its parent or subsidiaries or predecessor
	organizations during the past five (5) years. Include in the description the disposition of each such petition.
	aloposition of oden polition.
12.7	List and describe all successful Performance or Payment Bond claims made to
	your surety(ies) during the last five (5) years. The list and descriptions should
	include claims against the bond of the Bidder and its predecessor
	organization(s).
	List all claims, arbitrations, administrative bearings and leverite beautiful to a
12.8	List all claims, arbitrations, administrative hearings and lawsuits brought by or against the Bidder or its predecessor organization(s) during the last five (5)
12.0	years. The list shall include all case names; case, arbitration or hearing
	identification number; the name of the project over which the dispute arose; and
	a description of the subject matter of the dispute.

12.9 List and describe all criminal proceedings or hearings concerning business related offenses in which the Bidder, its principals or officers or predecessor or organization(s) were defendants.

12.10 Has the Bidder, its principals, officers or predecessor organization(s) been debarred or suspended from bidding by any government during the last five (5) years? If yes, provide details.

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CONSTRUCTION CONTRACT

00500. CONTRACT FORM

CONTRACT

THIS IS A CONTRACT, made and entered into this	day of
, 20, by and between The City of Hallandale Beach, hereinafter referred to as CITY and	f
, hereinafter referred to as the CONTRACTOR.	!
WITNESSETH, that the CONTRACTOR and the CITY, for consideration hereinafter name, agree as follows:	ns

ARTICLE 1

SCOPE OF WORK

- 1.1 The CONTRACTOR hereby agrees to furnish all of the labor, materials, equipment and services necessary to perform all of the work described in the Bid Project including Drawings (Design Plans), Specifications and Addenda thereto for the project entitled: BID #FY2010-2011-006: HALLANDALE BEACH ELEVATED WATER STORAGE TANKS REPAIRS FOR PROJECTS:
 - [A] BLUESTEN PARK 250,000 GALLON TANK AND PROJECT [B] BEACH TANK 500,000 GALLON TANK.
- 1.2 The CONTRACTOR and the City's Project Manager will develop a single list of items required to render complete, satisfactory, and acceptable the construction services, if applicable.
 - The City's Project Manager will contact the CONTRACTOR with the list of required items for this project and will provide a timeline for the CONTRACTOR to respond. The delivery of the list of items for the accomplishment of the construction project will be provided by the City's Project Manager to the CONTRACTOR within five (5) days of contract execution.

a) For contracts less than \$10 million dollars the parties shall, within thirty (30) days of substantial completion, develop and deliver a list required for accomplishment of the Project. If the contract is more than \$10 million dollars the parties shall accomplish same within sixty (60) days.

b) The final completion date under the Contract shall be extended at least thirty (30) days after the list is delivered in paragraph a above.

ARTICLE 2

CONTRACT TIME

- 2.1 The work to be performed under this Contract shall be commenced within 15 calendar days after the Project Initiation Date specified in the Notice to Proceed. The CITY shall instruct the CONTRACTOR to commence the work by written instructions in the form of a Notice to Proceed and a Purchase Order. These will not be issued until receipt of all required documents and after execution of the Contract by both parties. The receipt of all necessary permits by the CONTRACTOR is a condition precedent to the initiation of all work under this Contract. If CONTRACTOR is not in receipt of all necessary permits by the Project Initiation Date set forth in the Notice to Proceed, CONTRACTOR shall so notify CITY in writing immediately. CITY shall then have the option of issuing a revised Notice to Proceed.
- 2.2 Time is of the essence in this Contract. The work shall be substantial completed within 90 calendar days (for each tank) from the Project Initiation Date specified in the Notice to Proceed, and completed and ready for final payment in accordance with Article 21 within 120 calendar days from the Project Initiation Date specified in the Notice to Proceed.
- 2.3 Upon failure of the CONTRACTOR to substantially complete said Contract within the specified period of time (plus approved extensions, if any) the CONTRACTOR shall pay to CITY the sum of Five Hundred Dollars (\$500.00) for each calendar day after the time specified in paragraph 2.2 above (plus any approved extensions) for substantial completion. After substantial completion if CONTRACTOR shall neglect, refuse or fail to complete the remaining work within the Contract Time or any approved extension thereof, the CONTRACTOR shall pay to the CITY the sum of Five Hundred Dollars (\$500.00) for each calendar day after the time specified in paragraph 2.2. above (plus

any approved extensions) for completion and readiness for final payment. These amounts are not penalties but liquidated damages to the CITY. Liquidated damages are hereby fixed and agreed upon between the parties, recognizing the impossibility of precisely ascertaining the amount of damages that will be sustained by the CITY as a consequence of such delay, and both parties desiring to obviate any question of dispute concerning the amount of said damages and the cost and effect of the failure of the CONTRACTOR to complete the Contract on time.

2.4 The CITY is authorized to deduct liquidated damage amount from the monies due to CONTRACTOR for the work under this Contract, or as much thereof as the CITY may, at is own option, deem just and reasonable.

ARTICLE 3

THE CONTRACT SUM

- 3.1 Payments shall be made at the Contract unit prices or lump sum prices applicable to each integral part of the Contract. These prices shall be full compensation for all costs associated with completion of all work in full conformity with the requirements as stated or shown, or both, in the Bid Project.
- 3.2 The CITY reserves the right to add or delete work items from the project to meets its available budget.

3.3	In consideration of the work, labor, services and materials to be furnished
	by the CONTRACTOR, in accordance with the plans and specifications, the
	City agrees to pay to the CONTRACTOR, upon the completion and
	acceptance thereof by the City, or its duly authorized agent, the total
	Contract price of \$(), in words
	· · · · · · · · · · · · · · · · · · ·

The Contract price may include a 5% contingency amount for change orders that may be authorized in accordance with applicable policies and procedures and/or as authorized through the Commission motion for award of contract.

ARTICLE 4

INDEMNIFICATION

4.1 CONTRACTOR agrees to indemnify, save harmless and, at the City Attorney's option, defend or pay for an attorney selected by the City Attorney to defend CITY, their officers, agents, servants and employees against any and all claims, losses, liabilities and expenditures of any kind, including attorney's fees, court costs, and other expenses, caused by negligent act or omission of CONTRACTOR, any sub-contractors, their employees, agents, servants, or officers, or accruing, resulting from, or related to the subject matter of this Agreement including, without limitation, any and all claims, demands, or causes of action of any nature, whatsoever, resulting from injuries or damages sustained by any person or property. CONTRACTOR further agrees to indemnify and save harmless the CITY, their officers, agents and employees, for or on account of any injuries or damages received or sustained by any person or persons resulting from any construction defects, including latent defects. Neither the CONTRACTOR nor any of its subcontractors will be liable under this section for damages arising out of intentional torts of CITY or their officers, agents or employees. In the event that any action or proceeding is brought against CITY by reason of any such claim or demand, CONTRACTOR, upon written notice from CITY, shall defend such action or proceeding.

CONTRACTOR shall require all of the subcontractors working for it to provide the aforementioned indemnification in all contracts and subcontracts entered into and arising out of work performed by CONTRACTOR in connection with the Project.

- 4.2 To the extent considered necessary by the City Attorney, any sums due to CONTRACTOR under this Agreement may be retained by CITY until all of CITY's claims for indemnification pursuant to this Agreement have been settled or otherwise resolved; and any amount withheld shall not be subject to payment of interest by CITY.
- 4.3 In the event that any action or proceeding is brought by CONTRACTOR against CITY, CONTRACTOR hereby waives the right to a jury trial. The provisions of this Article shall survive the expiration or early termination of this Agreement.

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- 4.4 Contractor acknowledges that it has received adequate consideration concerning the monetary limitation on the indemnification provided to City, which, shall not be less than \$1 million per occurrence.
- 4.5 To the fullest extent permitted by law, the CONTRACTOR agrees to indemnify and hold-harmless the City, its officers and employees from any claims, liabilities, damages, losses, and costs, including, but not limited to, reasonable attorney fees to the extent caused, in whole or in part, by the professional negligence, error or omission of the CONTRACTOR or persons employed or utilized by the CONTRACTOR in performance of the Agreement.
 - 4.6 To the fullest extent permitted by law, the CONTRACTOR agrees to indemnify and hold-harmless the City, its officers and employees from any claims, liabilities, damages, losses, and costs, including, but not limited to, reasonable attorney fees to the extent caused, in whole or in part, by the recklessness or intentionally wrongful conduct, of the CONTRACTOR or persons employed or utilized by the CONTRACTOR in performance of the Agreement.
 - 4.7 Nothing in this Agreement is intended to serve as a waiver of sovereign immunity, or of any other immunity, defense, or privilege enjoyed by the City pursuant to Section 768.28 Florida Statutes.

ARTICLE 5

INSURANCE REQUIREMENTS

- 5.1 Without limiting any of the other obligations or liabilities of CONTRACTOR, CONTRACTOR shall provide, pay for, and maintain in force until all of its work to be performed under this Contract has been completed and accepted by CITY (or for such duration as is otherwise specified hereinafter), the insurance coverage set forth herein.
 - 5.1.1. Worker's Compensation insurance to apply for all employees incompliance with the "Workers' Compensation Law" of the State of Florida and all applicable federal laws. In addition, the policy(ies) must include:
 - 5.1.1.1. Employers' Liability with a limit of One Million Dollars (\$1,000,000.00) each accident.

- 5.1.1.2. If any operations are to be undertaken on or about navigable waters, coverage must be included for the U.S. Longshoremen and Harbor Workers Act and Jones Act.
- 5.1.2. Comprehensive General Liability with minimum limits of One Million Dollars (\$1,000,000.00) per occurrence, combined single limit for Bodily Injury Liability and Property Damage Liability. Coverage must be afforded on a form no more restrictive than the latest edition of the Comprehensive General Liability policy, without restrictive endorsements, as filed by the Insurance Services Office, and must include:
 - 5.1.2.1. Premises and/or Operations.
 - 5.1.2.2. Independent Contractors.
 - 5.1.2.3. Products and/or Completed Operations for contracts over Fifty Thousand Dollars (\$50,000.00) CONTRACTOR shall maintain in force until at least three years after completion of all work required under the Contract, coverage for products and Completed Operations, including Broad Form Property Damage.
 - 5.1.2.4. Explosion, Collapse and Underground Coverages.
 - 5.1.2.5. Broad Form Property Damage.
 - 5.1.2.6. Broad Form Contractual Coverage applicable to this specific Contract, including any hold harmless and/or indemnification agreement.
 - 5.1.2.7. Personal Injury Coverage with Employee and Contractual Exclusions removed, with minimum limits of coverage equal to those required for Bodily Injury Liability and Property Damage Liability.
 - 5.1.2.8. CITY is to be expressly included as an "Additional Insured" in the name of "City of Hallandale Beach", with respect to liability arising out of operations performed for CITY by or on behalf of

CONTRACTOR or acts or omissions of CITY in connections with general supervision of such operation.

- 5.1.3. Business Automobile Liability with minimum limits of One Million Dollars (\$1,000,000.00) per occurrence, combined single limit for Bodily Injury Liability and Property Damage Liability. Coverage must be afforded on a form no more restrictive than the latest edition of the Business Automobile Liability policy, without restrictive endorsements, as filed by the Insurance Services Office, and must include:
 - 5.1.3.1. Owned Vehicles.
 - 5.1.3.2. Hired and Non-Owned Vehicles.
 - 5.1.3.3. Employers' Non-Ownership.
- 5.2 If the initial insurance expires prior to the completion of the work, renewal copies of policies shall be furnished 30 days prior to the date of their expiration.
- 5.3 Notice of Cancellation and/or Restriction The policy(ies) must be endorsed to provide the City of Hallandale Beach with 30 days notice of cancellation and/or restriction
- 5.4 The CONTRACTOR shall furnish to the RISK MANAGER and the City's Project Manager Certificates of Insurance or endorsements evidencing the insurance coverage specified above within five (5) days after notification of award. The required Certificates of Insurance shall name the types of policies provided, refer specifically to this Contract, and state that such insurance is as required by this Contract. The Certificate of Insurance shall be in form similar to and contain the information set forth in Form 00608.
- 5.5 The official title of the owner is the "City of Hallandale Beach". This official title shall be used in all insurance documentation.

ARTICLE 6

WEATHER

6.1 No extension of time shall be granted for delays resulting from normal weather conditions prevailing in the area as defined by the average of

the last ten years of weather data as recorded by the U.S. Department of Commerce, National Oceanic and Atmospheric Administration at the Fort Lauderdale Weather Station.

6.2 No more than one day of time extension shall be granted for each day the precipitation, in inches exceeds one (1) inch at the Weather Station, and only when fifty percent or more of the scheduled construction work force cannot work due occurrence of such precipitation on the day claimed.

ARTICLE 7

HURRICANE PRECAUTIONS

- 7.1 During such periods of time as are designated by the United States Weather Bureau as being a hurricane warning or alert, the CONTRACTOR, at no cost to the CITY, shall take all precautions necessary to secure the Project site in response to all threatened storm events, regardless of whether the CITY or CITY ENGINEER has given notice of same.
- 7.2 Compliance with any specific hurricane warning or alert precautions will not constitute additional work.
- 7.3 The contractor acknowledges that threatened tropical storm activity is normal in Broward County and the mere possibility that a warning or watch might be declared is not a basis for compensable or non-compensable extension of time. Tropical Storm Watches and Warnings will not automatically result in a compensable extension of time.
- 7.4 Suspension of the Work caused by a threatened or actual storm event, regardless of whether the CITY has directed such suspension, will entitle the CONTRACTOR to additional Contract Time as non-compensable, excusable delay, and shall not give rise to a claim for compensable delay.

ARTICLE 8

PERMITS, LICENSES AND IMPACT FEES

8.1 Except as otherwise provided within the Supplemental Conditions, all permits and licenses required by federal, state, local or county laws, rules and regulations necessary for the execution of the work undertaken by the CONTRACTOR pursuant to this Contract shall be secured and paid by the CONTRACTOR. It is the CONTRACTOR'S responsibility to determine that all zoning requirements have been met

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prior to obtaining any permits or licenses. It is the CONTRACTOR'S responsibility to have and maintain appropriate Certificate(s) of Competency, valid for the type of work to be performed and for the jurisdiction in which the work is to be completed.

- 8.2. Impact fees levied by any municipality shall be paid by the CONTRACTOR. CONTRACTOR shall be reimbursed only for the actual amount of the impact fee levied by the municipality as evidenced by an invoice or other acceptable documentation issued by the municipality. Reimbursement to the CONTRACTOR in no event shall include profit or overhead of the CONTRACTOR.
- 8.3 Necessity of complying with permit requirements. CONTRACTOR and the City agree that the failure of the Agreement to address a particular permit, condition, fee, term or restriction, shall not relieve CONTRACTOR of the necessity of complying with the law governing said permitting requirements, conditions, fee, terms and restrictions.

ARTICLE 9

DESIGN PLANS AND WORKING DRAWINGS

9.1 The Bid Project includes drawings (design plans) and specifications. The CITY, through the CITY ENGINEER, shall have the right to modify the details of these drawings (design plans) and specifications, to supplement said design plans and additional design plans, drawings or additional information as the work proceeds, all of which shall be considered as part of the Bid Project. In case of disagreement between the written and graphic portions of the Bid Project, the written portion shall govern.

ARTICLE 10

"OR EQUAL" CLAUSE:

10.1 Whenever a material, article or piece of equipment is identified in the Bid Project including drawings (design plans) and specifications by reference to manufacturers' or vendors' names, trade names, catalog numbers, or otherwise, it is intended merely to establish a standard; and, unless it is followed by words indicating that no substitution is permitted because of form fit function and quality. Any material, article, or equipment of other manufacturers and vendors which will perform or serve the requirements of the general design will be considered equally acceptable provided the materials, article or equipment so proposed is, in the opinion of the CITY, equal in substance, quality and function.

10.2 The CITY ENGINEER will be the sole judge of acceptability, and no substitute will be ordered, installed or used without the CITY ENGINEER'S prior written acceptance which will be evidenced by either a Change Order or an approved Shop Drawing. CITY may require CONTRACTOR to furnish at CONTRACTOR'S expense a special performance guarantee or other Surety with respect to any substitute.

ARTICLE 11

DEFECTIVE WORK

- 11.1 The CITY ENGINEER shall have the authority to reject or disapprove work which he finds to be defective. The CONTRACTOR shall promptly either, as directed, correct all defective work or remove it from the site and replace it with nondefective work. CONTRACTOR shall bear all direct, indirect and consequential costs of such removal or corrections including cost of testing laboratories and personnel.
- 11.2 If, within one year after substantial completion or such longer period of time as may be prescribed by the terms of any applicable special guarantee required by the Contract Documents or by any specific provision of the Contract Documents, any of the work is found to be defective or not in accordance with the Contract Documents, the CONTRACTOR shall correct it promptly without cost to the CITY, after receipt of written notice from the CITY to do so. Nothing contained herein shall be construed to establish a period of limitation with respect to any other obligation which the CONTRACTOR might have under the Contract Documents.
- Should the CONTRACTOR fail or refuse to remove or correct any 11.3 defective work performed or to make any necessary repairs in an acceptable manner, and in accordance with the requirements of the Contract with the time indicated in writing, the CITY shall have the authority to cause the unacceptable or defective work to be removed or renewed, or make such repairs as may be necessary to be made at the CONTRACTOR'S expense. Any expense incurred by the CITY in which the CONTRACTOR has failed or refused to make shall be paid for out of any monies due or which may become due to the CONTRACTOR, or may be charged against the Performance and Payment Guaranty. Continue failure or refusal on the part of the CONTRACTOR to make any or all necessary repairs promptly, fully, and to declare the Contract forfeited, in which case the CITY at its option, may purchase materials, tools, and equipment and employ labor or may contract with other individual, firm or corporation, or may

proceed with its own forces to perform the work. All costs and expenses incurred thereby shall be charged against the defaulting CONTRACTOR and the amount thereof deducted from any monies due, or which may become due to him, or shall be charged against the Performance and Payment Guaranty. Any special work performed, as described herein, shall not relieve the CONTRACTOR in any way from his responsibility for the work performed by him.

11.4 Failure to reject any defective work or material shall not in any way prevent later rejection when such defect is discovered, or obligate the CITY to final acceptance.

ARTICLE 12

SUBCONTRACTS

- 12.1 The CONTRACTOR shall, within 15 calendar days after the signing of the Contract, notify the CITY in writing of the names of Subcontractors proposed for the work. Such Subcontractor must be in compliance with the provisions of Chapter 9 of the Broward County Code of Ordinances and/or state law as it relates to Certificates of Competency. The CONTRACTOR shall have a continuing obligation to notify the CITY of any change in Subcontractors.
- 12.2 CONTRACTOR shall not employ any Subcontractor against whom CITY may have a reasonable objection. CONTRACTOR shall not be required to employ any Subcontractor against whom CONTRACTOR has a reasonable objection.
- 12.3 The CONTRACTOR shall be fully responsible for all acts and omissions of his Subcontractors and of persons directly or indirectly employed by his Subcontractors and of persons for whose acts any of them may be liable to the same extent that he is responsible for the acts and omissions of persons directly employed by him. Nothing in the Contract Documents shall create any contractual relationship between any subcontractor and the CITY or any obligation on the part of the CITY to pay or to see the payment of any monies due any Subcontractor. The CITY may furnish to any Subcontractor evidence of amounts paid to the CONTRACTOR on account of specific work performed.
- 12.4 The CONTRACTOR agrees to bind specifically every Subcontractor to the applicable terms and conditions of the Contract Documents for the benefit of the CITY.

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ARTICLE 13

SEPARATE CONTRACTS

- 13.1 The CITY reserves the right to let other Contracts in connection with this work. The CONTRACTOR shall afford other contractors reasonable opportunity for the introduction and storage of their materials and the execution of their work and shall properly connect and coordinate this work with theirs.
- 13.2 If any part of the CONTRACTOR'S work depends for proper execution or results upon the work of any other contractor, the CONTRACTOR shall inspect and promptly report to the CITY ENGINEER any defects in such work that render it unsuitable for such proper execution and results. CONTRACTOR'S failure to so inspect and report shall constitute an acceptance of the other contractor's work as fit and proper for the reception of his work, except as to defects which may develop in other contractor's work after the execution of his work.
- 13.3 The CONTRACTOR shall conduct his operations so as to create no interference or impact on any other contractor on the site. Should such interference or impact occur, the CONTRACTOR shall be liable to the affected contractor for the cost of such interference or impact.
- 13.4 To insure the proper execution of his subsequent work, the CONTRACTOR shall inspect the work already in place and shall at once report to the CITY ENGINEER any discrepancy between the executed work and the requirements of the Bid Project.

ARTICLE 14

DAMAGE TO EXISTING FACILITIES, EQUIPMENT OR UTILITIES

- 14.1 CONTRACTOR shall have full responsibility for reviewing and checking such information and data, for locating all underground facilities shown or indicated in the Contract Documents, for coordination of the work with the owners of such underground facilities during construction, for the safety and protection thereof and for repairing any damage thereto resulting from the work, the cost of all of which will be considered as having been included in the Contract price.
- 14.2 During construction of buildings and/or during improvements, CONTRACTOR covenants and agrees that it shall safely maintain the site of construction activities and protect against damage to persons and property by reason of construction activities and will provide adequate security during non-construction periods. In the case of

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improvements.

damage or loss to the building and/or improvements constructed on the property by CONTRACTOR in accordance with this Agreement, CONTRACTOR shall, as soon as possible after the occurrence of such loss or damage, repair or rebuild the buildings and/or improvements in such manner that the buildings and/or improvements after such repairing or rebuilding shall be of the same general character as set forth in this Agreement and the approved Scope of Work and at least equal in value to the buildings and improvements prior to such loss or damage. Such repairs shall begin within ninety (90) calendar days after such occurrence or if rebuilding is required, such rebuilding shall be begun within one hundred eighty (180) calendar days after such occurrence and in either case shall be completed in a reasonable time, subject to extension for Permitted Delays; provided insurance funds are made available to CONTRACTOR for such repair or rebuilding, in which event CONTRACTOR shall commence repairs or rebuilding within one hundred eighty (180) days from the date of occurrence. CONTRACTOR shall have the reasonable right to extend the time period for rebuilding in the event of a major catastrophic event (similar in scope and widespread damage to Hurricane Andrew) which would reasonably affect the ability to secure insurance proceeds, labor, public services, and other required elements to reasonably begin said rebuilding. CONTRACTOR shall pay for all such repairing and rebuilding so that the property and the buildings and improvements shall be free and clear of all liens of mechanics and materials and similar liens arising out of such repair, rebuilding or reconstruction of the buildings and

ARTICLE 15

MONITORING REPORTS

15.1 CONTRACTOR shall provide the City, in a format reasonably acceptable to the City and CONTRACTOR, information, data and reports to be used by the City in monitoring CONTRACTOR'S performance in carrying out the Project.

ARTICLE 16

CHANGE OF CONTRACT TIME

16.1 The "Contract Time" may only be changed by a Change Order. Any claim for an extension of the "Contract Time" shall be based on written notice delivered by the party making the claim to the CITY ENGINEER and the City's Project Manager within 7 calendar days of the beginning of the occurrence of the event giving rise to the claim and stating the general nature of the claim. Notice of the extent of the claim with

supporting data shall be delivered within 15 days after the end of such occurrence (unless the CITY allows an additional period of time to ascertain more accurate data in support of the claim) and shall be accompanied by the claimant's written statement that the adjustment claimed is the entire adjustment to which the claimant has reason to believe it is entitled as a result of the occurrence of said event. All claims for adjustment in the "Contract Time" shall be determined by the CITY ENGINEER in accordance with paragraph 16.2, if CITY and CONTRACTOR cannot otherwise agree. No claim for an adjustment in the "Contract Time" will be valid if not submitted in accordance with the requirements of this paragraph.

- 16.2 The "Contract Time" will be extended in an amount equal to time lost due to delays beyond the control of and through no fault or negligence of the CONTRACTOR. Such delays shall include, but not limited to, acts or neglect by CITY or the CITY ENGINEER, or by any employee of either, or any separate contractor employed by the CITY, fires, floods, labor disputes, epidemics, abnormal weather conditions or acts of God.
- 16.3 No Damages for Delay:

Except as provided in Article 1.2(a) and (b) NO CLAIM FOR DAMAGES OR ANY CLAIM OTHER THAN FOR AN EXTENSION OF TIME SHALL BE MADE OR ASSERTED AGAINST THE CITY BY REASON OF ANY DELAYS. The CONTRACTOR shall not be entitled to an increase in the Contract Sum or payment or compensation of any kind from the CITY for direct, indirect, consequential, impact or other costs, expenses or damages. including but not limited to costs of acceleration or inefficiency, arising because of delay, disruption, interference or hindrance from any cause whatsoever, whether such delay, disruption, interference or unforeseeable, or avoidable or unavoidable; provided, however, that this provision shall not preclude recovery of damages by the CONTRACTOR for hindrances or delays due solely to fraud, bad faith or active interference on the part of the CITY or its agents. Otherwise, the CONTRACTOR shall be entitled only to extensions of the Contract Time as the sole and exclusive remedy for such resulting delay, in accordance with and to the extent specifically provided above.

16.4 Changes in the Work or Terms of Contract Documents:

16.4.1 Without invalidating the Contract and without notice to any surety, CITY reserves and shall have the right, from time to time to make such increases, decreases or other changes in the character or quantity of the Work as may be considered necessary or desirable to complete fully and acceptably the proposed construction in a satisfactory manner. Any extra or additional work within the scope of this Project must be accomplished by means of appropriate Field Orders and Supplemental Instructions or

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Change Orders. Surety waives its right to notice of changes in the Contract Terms and/or Contract Price.

16.4.2 Any changes to the terms of the Contract Documents must be contained in a written document, executed by the parties hereto, with the same formality and of equal dignity prior to the initiation of any work reflecting such change, except as provided for in Subparagraph 16.4.1, above. This section shall not prohibit the issuance of Change Orders executed only by CITY as hereinafter provided.

16.5 Field Orders and Supplemental Instructions:

The CITY ENGINEER and the City's Project Manager, shall have the right to approve and issue Field Orders setting forth written interpretations of the intent of the Contract Documents and ordering minor changes in Work execution, providing the Field Order involves no change in the Contract Price or the Contract Time. ENGINEER shall have the right to approve and issue Supplemental Instructions setting forth written orders, instructions, or interpretations concerning the Contract Documents or its performance, provided such Supplemental Instructions involve no change in the Contract Price or the Contract Time.

ARTICLE 17

CHANGE ORDERS

- 17.1 Changes in the quantity or character of the Work within the scope of the Project which are not properly the subject of Field Orders or Supplemental Instructions, including all changes resulting in changes in the Contract Price, or the Contract Time, shall be authorized only by Change Orders approved in advance and issued in accordance with the procedures customarily utilized by CITY, as amended from time to time.
- 17.2 CONTRACTOR shall not start work on any changes requiring an increase in the Contract Price or the Contract Time until a Change Order setting forth the adjustments is approved by CITY. Upon receipt of a Change Order, CONTRACTOR shall promptly proceed with the work set forth within the document.
- 17.3 In the event satisfactory adjustment cannot be reached for any item requiring a change in the Contract Price or Contract Time, and a Change Order has not been issued, CITY reserves the right at its sole option to either terminate the Contract as it applies to the items in question and make such arrangements as may be deemed necessary to complete the disputed work; to remove the disputed work from the scope of work and to process a unilateral change order reducing the contract price; or submit the matter in dispute to CITY ENGINEER. During the pendency of the dispute, and upon

receipt of a Change Order approved by CITY, CONTRACTOR shall promptly proceed with the change in the Work involved and advise the CITY ENGINEER and City's Project Manager in writing within seven (7) calendar days of CONTRACTOR's agreement or disagreement with the method, if any, provided in the Change Order for determining the proposed adjustment in the Contract Price or Contract Time.

17.4 Under circumstances determined necessary by CITY, Change Orders may be issued unilaterally by CITY without consent of Surety.

ARTICLE 18

VALUE OF CHANGE ORDER WORK

- 18.1 The value of any work covered by a Change Order or of any claim for an increase or decrease in the Contract Price shall be determined in one of the following ways:
 - 18.1.1. By mutual acceptance of a lump sum which CONTRACTOR and CITY acknowledge contains a component for overhead and profit.
 - 18.1.2. On the basis of the "cost of work," determined as provided in Sections 18.2 and 18.3, plus a CONTRACTOR's fee for overhead and profit that is determined as provided in Section 18.4.
- 18.2 The term "cost of work" means the sum of all direct costs necessarily incurred and paid by CONTRACTOR in the proper performance of the Work described in the Change Order. Except as otherwise may be agreed to in writing by CITY, such costs shall be in amounts no higher than those prevailing in the locality of the Project, shall include only the following items and shall not include any of the costs itemized in Section 18.3.
 - 18.2.1. Payroll costs for employees in the direct employ of CONTRACTOR in the performance of the work described in the Change Order under schedules of job classifications agreed upon by CITY and CONTRACTOR. Payroll costs for employees not employed full time on the work covered by the Change Order shall be apportioned on the basis of their time spent on the work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits which shall include social security contributions, unemployment, excise and payroll taxes, workers' or workmen's compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay application thereto. Such employees shall include superintendents and foremen at the site. The expenses of performing the work after regular working hours, on Sunday or legal holidays shall be included in the above to the extent authorized by CITY.

- 18.2.2. Cost of all materials and equipment furnished and incorporated in the work, including costs of transportation and storage thereof, and manufacturers' field services required in connection therewith. All cash discounts shall accrue to CONTRACTOR unless CITY deposits funds with CONTRACTOR with which to make payments, in which case the cash discounts shall accrue to CITY. All trade discounts, rebates and refunds, and all returns from sale of surplus materials and equipment shall accrue to CITY and CONTRACTOR shall make provisions so that they may be obtained. Rentals of all construction equipment and machinery and the parts thereof whether rented from CONTRACTOR or others in accordance with rental agreements approved by CITY ENGINEER and the costs of transportation, loading, unloading, installation, dismantling and removal thereof, all in accordance with the terms of said agreements. The rental of any such equipment, machinery or parts shall cease when the use thereof is no longer necessary for the work.
- 18.2.3. Payments made by CONTRACTOR to Subcontractors for work performed by Subcontractors. If required by CITY, CONTRACTOR shall obtain competitive bids from Subcontractors acceptable to CONTRACTOR and shall deliver such bids to CITY ENGINEER who will then determine which bids will be accepted. If the Subcontract provides that the Subcontractor is to be paid on the basis of cost of the work plus a fee, the Subcontractor's cost of the work shall be determined in the same manner as CONTRACTOR'S cost of the work. All Subcontractors shall be subject to the other provisions of the Contract Documents insofar as applicable, including but not limited to the CITY'S False Claims Ordinance.
- 18.2.4. Cost of special engineers, including, but not limited to, engineers, architects, testing laboratories, and surveyors employed for services specifically related to the performance of the work described in the Change Order.
- 18.2.5. Supplemental costs including the following:
- 8.2.5.1 The proportion of necessary transportation, travel and subsistence expenses of CONTRACTOR's employees incurred in discharge of duties connected with the work except for local travel to and from the site of the work or to Contractor's home office or branch office.
- 18.2.5.2 Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office and temporary facilities at the site and hand tools not owned by the workmen, which are consumed in the performance of the work, and cost less market value of such items used but not consumed which remains the property of CONTRACTOR.
- 18.2.5.3. Sales, use, or similar taxes related to the work, and for which

CONTRACTOR is liable, imposed by any governmental authority, provided however, that the Contractor shall not be paid or, or reimbursed, the cost of fines and penalties levied by entities other than the City of Hallandale Beach.

- 18.2.5.4. Deposits lost for causes other than CONTRACTOR's negligence; royalty payments and fees for permits and licenses.
- 18.2.5.5. The cost of utilities, fuel and sanitary facilities at the site.
- 18.2.5.6. Receipted minor expenses such as telegrams, long distance telephone calls (except to Contractor's home office or branch offices), telephone service at the site, expressage and similar petty cash items in connection with the work.
- 18.2.5.7. Cost of premiums for additional bonds and insurance required because of changes in the work or default by the Contractor.
- 18.3 The term "cost of the work" shall not include any of the following:
 - 18.3.1. Payroll costs and other compensation of CONTRACTOR's officers, executives, principals (of partnership and sole proprietorships), general managers, engineers, architects, estimators, lawyers, scheduling consultants, auditors, accountants, purchasing and contracting agents, expediters, timekeepers, clerks and other personnel employed or retained by CONTRACTOR or surety, whether at the site or in its principal or a branch office for general administration of the work and not specifically included in the agreed-upon schedule of job classifications referred to in Section 18.2.1., all of which are to be considered administrative costs covered by CONTRACTOR's fee.
 - 18.3.2. Expenses of CONTRACTOR's principal and branch offices other than CONTRACTOR's office at the site.
 - 18.3.3. Any part of CONTRACTOR's capital expenses, including interest on CONTRACTOR's capital employed for the work and charges against CONTRACTOR for delinquent payments.
 - 18.3.4. Cost of premiums for all Bonds and for all insurance whether or not CONTRACTOR is required by the Contract Documents to purchase and maintain the same, except for additional bonds and insurance required because of cardinal changes in the work.
 - 18.3.5. Costs due to the negligence or neglect of CONTRACTOR, any Subcontractors, or anyone directly or indirectly employed by any of them

or for whose acts any of them may be liable, including but not limited to, the correction of defective work, disposal of materials or equipment wrongly supplied and making good any damage to property.

- 18.3.6. Other overhead or general expense costs of any kind and the cost of any item not specifically and expressly included in Section 18.2.
- 18.4 CONTRACTOR's fee allowed to CONTRACTOR for overhead and profit shall be determined as follows:
 - 18.4.1. A mutually acceptable fixed fee or,
 - 18.4.2. If none can be agreed upon, a fee based on the following percentages of the various portions of the cost of the work:
 - 18.4.2.1. For costs incurred under Sections 18.2.1 and 18.2.2, CONTRACTOR's fee shall not exceed ten percent (10%).
 - 18.4.2.2. For costs incurred under Section 18.2.3, CONTRACTOR's fee shall not exceed seven and one half percent (7.5%); and if a subcontract is on the basis of cost of the work plus a fee, the maximum allowable to the Subcontractor as a fee for overhead and profit shall not exceed ten percent (10%); and
 - 18.4.2.3. No fee shall be payable on the basis of costs itemized under Sections 18.2.4 and 18.2.5, (except Section 18.2.5.3), and Section 18.3.
- The amount of credit to be allowed by CONTRACTOR to CITY for any such change, which results in a net decrease in cost, will be the amount of the actual net decrease. When both additions and credits are involved in any one change, the combined overhead and profit, if otherwise allowed, shall be figured on the basis of the net increase or decrease, if any, however, CONTRACTOR shall not be entitled to claim lost profits for any Work not performed.
- 18.6 Whenever the cost of any work is to be determined pursuant to Sections 18.2 and 18.3, CONTRACTOR will submit in a form acceptable to CITY ENGINEER an itemized cost breakdown together with the supporting data.
- 18.7 Where the quantity of any item of the Work that is covered by a unit price is increased or decreased by more than twenty percent (20%) from the quantity of such work indicated in the Contract Documents, an appropriate Change Order shall be issued to adjust the unit price, if warranted.

- Whenever a change in the Work is to be based on mutual acceptance of a lump sum, whether the amount is an addition, credit or no change-in-cost, CONTRACTOR shall submit an initial cost estimate acceptable to CITY ENGINEER and the City's Project Manager.
 - 18.8.1. Breakdown shall list the quantities and unit prices for materials, labor, equipment and other items of cost.
 - 18.8.2. Whenever a change involves CONTRACTOR and one or more Subcontractors and the change is an increase in the Contract Price, overhead and profit percentage for CONTRACTOR and each Subcontractor shall be itemized separately.
- 18.9 Each Change Order must state within the body of the Change Order whether it is based upon unit price, negotiated lump sum, or "cost of the work."

ARTICLE 19

TERMINATION FOR CONVENIENCE

- 19.1 The CITY may terminate the Contract for its convenience, at any time, with or without cause, upon thirty (30) days written notice to CONTRACTOR.
- 19.2 Upon such notice of termination, CONTRACTOR will immediately terminate its performance and turn over all of its work product (e.g. plans to the CITY.
- 19.3 CONTRACTOR will then submit a final statement to the CITY for all services performed (based on percentage of project completion) prior to the notice of termination for convenience.
- 19.4 The CONTRACTOR is precluded from recovering damages for loss of anticipated, but unearned profit on the Contract, as well as consequential damages.

ARTICLE 20

SHOP DRAWINGS

20.1 The CONTRACTOR shall submit Shop Drawings for all equipment, apparatus, machinery, fixtures, piping, wiring, fabricated structures and manufactured articles. The purpose of the Shop Drawings is to show the suitability, efficiency, technique of manufacture, installation requirements, details of the item and evidence of its compliance or noncompliance with the Bid Project.

- 20.2 The CONTRACTOR shall thoroughly review and check the Shop Drawings and each and every copy shall show this approval thereon.
- 20.3 If the Shop Drawings show or indicate departures from the Contract requirements, the CONTRACTOR shall make specific mention thereof in his letter of transmittal. Failure to point out such departures shall not relieve the CONTRACTOR from his responsibility to comply with the Bid Project.
- 20.4 The CITY ENGINEER'S approval of the Shop Drawings will be general and shall not relieve the CONTRACTOR of responsibility for the accuracy of such Drawings, nor for the proper fitting and construction of the work, nor for the furnishing of materials or work required by the Contract and not indicated on the Drawings. No work called for by Shop Drawings shall be performed until the said Drawings have been approved by the CITY ENGINEER. Approval shall not relieve the CONTRACTOR from responsibility for errors or omissions of any sort on the Shop Drawings.
- 20.5 The CONTRACTOR shall keep one set of Shop Drawings marked with the CITY ENGINEER'S approval at the job site at all times.

ARTICLE 21

PROGRESS PAYMENTS

All invoices and/or bills and/or requests for payments are to be sent to the City Engineer and the City's Project Manager.

- 21.1 The CONTRACTOR may request payments for work completed at intervals of not more than once a month. The CONTRACTOR'S requisition shall show a complete breakdown of the project components, the quantities completed and the amount due, together with such supporting evidence as may be required by the CITY ENGINEER. Each requisition shall be submitted in triplicate to the CITY ENGINEER for approval. CITY shall make payment to the CONTRACTOR within 25 days after approval by the CITY ENGINEER of CONTRACTOR'S requisition for payment.
 - a) Overdue notice. The CONTRACTOR may send the City an overdue notice if the invoice is not paid or rejected within the time frame in Section 21.1, and four (4) business days following the delivery of overdue notice the payment required by the City shall be accepted, rejected or rejected in part.

- 21.2 Retainage: The CONTRACTOR agrees that ten percent (10%) of monies earned by CONTRACTOR shall be retained by CITY until fifty percent (50%) completion of the project. After 50% completion of the project and prior to Final Payment, the Contractor may request a reduction of retainage to five percent (5%) of monies earned by CONTRACTOR. The CITY may retain amounts greater than those set forth above that are the subject of a good faith dispute pursuant to Federal Statute 255.078 (6), the subject of a claim brought pursuant to Section 255.05, Florida Statutes, or otherwise the subject of a claim or demand by the CITY or CONTRACTOR.
- 21.3 The CITY may withhold in whole or in part, payment to such extent as may be necessary to protect itself from loss on account of:
 - 21.3.1. Defective work not remedied.
 - 21.3.2. Claims filed or reasonable evidence indicating probable filing of claims by other parties against the CONTRACTOR.
 - 21.3.3. Failure of the CONTRACTOR to make payments properly to Subcontractors or for material or labor.
 - 21.3.4 Damage to another Contractor not remedied.

When the above grounds are removed or resolved or the CONTRACTOR provides a surety bond or a consent of Surety. satisfactory to the CITY which will protect the CITY in the amount withheld, payment may be made in whole or in part.

ARTICLE 22

ACCEPTANCE AND FINAL PAYMENT

- 22.1 Upon receipt of written notice from the CONTRACTOR that the work is ready for final inspection and acceptance, the CITY shall within ten days make an inspection thereof. If the CITY finds the work acceptable under the Contract and the Contract fully performed, a Final Certificate of Payment (Form 00826) shall be issued by the CITY, over his own signature, stating that the work required by the Contract has been completed and is accepted under the terms and conditions thereof.
- 22.2 Before issuance of the Final Certificate for Payment, the CONTRACTOR shall deliver to the CITY a complete release of all liens

arising out of this Contract, or receipts in full in lieu thereof, and an Affidavit certifying that all suppliers and Subcontractors have been paid in full and that all other indebtedness connected with the work has been paid, and a consent of the Surety of Final Payment. The CITY may withhold final payment under the same terms and conditions as set forth in Section 21.3 above.

- 22.3 If, after the work has been substantially completed, full completion thereof is materially delayed through no fault of the CONTRACTOR, the CITY shall, without terminating the Contract, make payment of the balance due for that portion of the work fully completed and accepted. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute waiver of claims.
- 22.4 The making and acceptance of the final payment shall constitute a waiver of all claims by the CITY, other than those arising from faulty or defective work, failure of the work to comply with requirements of the Contract Documents or terms of any special warranties required by the Contract Documents. It shall also constitute a waiver of all claims by the CONTRACTOR, except those previously made in writing and identified by the CONTRACTOR as unsettled at the time of the application for final payment.

ARTICLE 23

CITY'S RIGHT TO TERMINATE CONTRACT

23.1 If CONTRACTOR fails to begin the Work within fifteen (15) calendar days after the Project Initiation Date, or fails to perform the Work with sufficient workers and equipment or with sufficient materials to insure the prompt completion of the Work, or shall perform the Work unsuitably, or cause it to be rejected as defective and unsuitable, or shall discontinue the prosecution of the Work pursuant to the accepted schedule or if CONTRACTOR shall fail to perform any material term set forth in the Contract Documents or if CONTRACTOR shall become insolvent or be declared bankrupt, or commit any act of bankruptcy or insolvency, or shall make an assignment for the benefit of creditors, or for any other cause whatsoever shall not carry on the Work in an acceptable manner, CITY may give notice in writing to CONTRACTOR and its Surety of such delay, neglect or default, specifying the same. Nevertheless, Surety waives its right to notice pursuant to this paragraph. If CONTRACTOR, within a period of ten (10) calendar days after such notice, shall not proceed in accordance therewith, then CITY may neglect or default and CONTRACTOR's failure to comply with such notice, terminate the services of CONTRACTOR, exclude CONTRACTOR from the Project site and take the prosecution of the Work out of the hands of CONTRACTOR, and appropriate or use any or all materials and equipment

on the Project site as may be suitable and acceptable. In such case, CONTRACTOR shall not be entitled to receive any further payment until the Project is completed. In addition CITY may enter into an agreement for the completion of the Project according to the terms and provisions of the Contract Documents, or use such other methods as in City's sole opinion shall be required for the completion of the Project according to the terms and provisions of the Contract Documents, or use such other methods as in City's sole opinion shall be required for the completion of the Project in an acceptable manner. All damages, costs and charges incurred by CITY, together with the costs of completing the Project and any fines or levies that may be assessed against the City by any governmental entity or by Broward County as a result of late completion of the Project, shall be deducted from any monies due or which may become due to CONTRACTOR. In case the damages and expenses so incurred by CITY shall exceed the unpaid balance, then CONTRACTOR shall be liable and shall pay to CITY the amount of said excess.

23.2 If after notice of termination of CONTRACTOR's right to proceed, it is determined for any reason that CONTRACTOR was not in default, the rights and obligations of CITY and CONTRACTOR shall be the same as if the notice of termination had been issued pursuant to the Termination for Convenience clause as set forth in Article 19.

ARTICLE 24

CONTRACTOR'S RIGHT TO STOP WORK OR TERMINATE CONTRACT

If CITY ENGINEER received CONTRACTOR's proper Application for Payment, and should CITY ENGINEER fail to review and approve or state in writing reasons for not approving, or for rejecting, of the Application for Payment within fifteen (15) business days after it is presented, then CONTRACTOR shall provide CITY with written notice of same, and if CITY fails either to pay CONTRACTOR within thirty (30) business days after CITY receives CONTRACTOR's notice, CITY shall notify CONTRACTOR in writing of any objection to the Application for Payment, then CONTRACTOR shall, give a second written notice to CITY of such delay, neglect or default, specifying the same and if CITY, within a period of ten (10) calendar days after such second notice shall not remedy the delay, neglect, or default upon which the notice is based, then CONTRACTOR may stop work or terminate this Contract and recover from CITY payment for all work executed and reasonable expenses sustained therein plus reasonable termination expenses. In such event, the contract shall be deemed terminated for convenience, and CONTRACTOR shall be paid for all work executed and expenses incurred prior to termination in addition to termination settlement costs reasonably incurred by CONTRACTOR relating

to commitments, which had become firm prior to the termination. Payment shall include reasonable profit for work/services performed. No payment shall be made for profit for work or services that have not been performed or for consequential damages.

ARTICLE 25

DIFFERING SITE CONDITIONS

In the event that during the course of the Work CONTRACTOR encounters subsurface or concealed conditions at the Project site which differ materially from those shown on the Contract Documents and from those ordinarily encountered and generally recognized as inherent in work of the character called for in the Contract Documents and Supplementary Conditions; or unknown physical conditions of the Project site, of an unusual nature, which differ materially from that ordinarily encountered and generally recognized as inherent in work of the character called for in the Contract Documents in the locales such as that where the work is to be done. CONTRACTOR shall. within twenty-four (24) hours of their discovery, notify CITY in writing of the existence of the aforesaid conditions. CITY shall, within two (2) business days after receipt of CONTRACTOR's written notice, investigate the site conditions identified by CONTRACTOR. If, in the sole opinion of CITY ENGINEER with the consent of City's Project Manager, the conditions do materially so differ and cause an increase or decrease in CONTRACTOR's cost of, or the time required for, the performance of any part of the Work, CITY ENGINEER shall recommend an equitable adjustment to the Contract Price, or the Contract Time, or both. If CITY and CONTRACTOR cannot agree on an adjustment in the Contract Price or Contract Time, the adjustment shall be referred to CITY ENGINEER for determination in accordance with the provision for resolving disputes. Should CITY ENGINEER determine that the conditions of the Project site are not so materially different to justify a change in the terms of the Contract, CITY ENGINEER shall so notify CONTRACTOR in writing, stating the reasons, and such determination shall be final and binding upon the parties hereto.

No request for an equitable adjustment or change to the Contract Price or Contract Time for differing site conditions shall be allowed if made after the date certified by CITY ENGINEER as the date of substantial completion.

ARTICLE 26

RESOLUTION OF DISPUTES

- 26.1 To prevent all disputes and litigation, it is agreed by the parties hereto that the CITY ENGINEER shall decide all questions, claims, difficulties and disputes of whatever nature which may arise relative to the technical interpretation of the Contract Documents and fulfillment of this Contract as to the character, quality, amount and value of any work done and materials furnished, or proposed to be done or furnished under or, by reason of, the Contract Documents and CITY ENGINEER's estimates and decisions upon all claims, questions, difficulties and disputes shall be final and binding to the extent provided in Section 26.2. Any claim, question, difficulty or dispute which cannot be resolved by mutual agreement of CITY and CONTRACTOR shall be submitted to ENGINEER in writing within twenty-one (21) calendar days. Unless a different period of time is set forth herein, CITY ENGINEER shall notify CONTRACTOR in writing of CITY ENGINEER's decision within twenty-one (21) calendar days from the date of the submission of the claim, question, difficulty or dispute, unless CITY ENGINEER requires additional time to gather information or allow the parties to provide additional information. All non-technical administrative disputes shall be determined by the CITY ENGINEER and the City's Contract Manager pursuant to the time periods provided herein. During the pendency of any dispute and after a determination thereof, CONTRACTOR and CITY shall act in good faith to mitigate any potential damages including utilization of construction schedule changes and alternate means of construction.
- In the event the determination of a dispute under this Article is unacceptable to either party hereto, the party objecting to the determination must notify the other party in writing within ten (10) days of receipt of the written determination. The notice must state the basis of the objection and must be accompanied by a statement that any Contract Price adjustment claimed is the entire adjustment to which the objecting party has reason to believe it is entitled to as a result of the determination. Within sixty (60) days after a disputed invoice or during Final Completion of the Work, the parties shall participate in settlement discussions to address all objections to any determinations hereunder and to attempt to prevent litigation. Should any objection not be resolved, the parties retain all their legal rights and remedies provided under State law. This article shall not limit the CITY'S rights under the CITY'S False Claims Ordinance.

ARTICLE 27

APPLICABLE LAW AND VENUE

The parties expressly agree that this Contract shall be construed and interpreted in accordance with the laws of the State of Florida. Venue for adjudication of disputes and litigation concerning this CONTRACT shall be in Broward County, Florida.

BY ENTERING INTO THIS AGREEMENT, CONTRACTOR AND CITY HEREBY EXPRESSLY WAIVE ANY RIGHTS EITHER PARTY MAY HAVE TO A TRIAL BY JURY OF ANY CIVIL LITIGATION RELATED TO THIS AGREEMENT.

Nothing in this Agreement is intended to serve as a waiver of sovereign immunity, or of any other immunity, defense, or privilege enjoyed by the City pursuant to Section 768.28 Florida Statutes.

ARTICLE 28

CONTRACT DOCUMENTS

- 28.1 This Contract incorporates by reference the following documents: the Bid Project including drawings (design plans) and specifications, the Notice for Bids, the Addenda to the Bid Project, the Bid Tender Form, the record of Contract awarded by the City of Hallandale Beach, the Contract, the Performance and Payment Guaranty, any additional documents the submission of which is required by this Bid Project, the Notice of Award, the Notice to Proceed, and the Purchase Order.
- 28.2 Where there is a conflict between any provision set forth within the General Conditions and a more stringent state or federal provision which is applicable to this Project, the more stringent state or federal provision shall prevail.
- 28.3 This document incorporates and includes all prior negotiations, correspondence, conversations, agreements, or understandings applicable to the matters contained herein and the parties agree that there are not commitments, agreements, or understandings concerning the subject matter of these Contract Documents that are not contained herein. Accordingly, it is agreed that no deviation from the terms hereof shall be predicated upon any prior representations or agreements whether oral or written.

28.4 By execution of this Agreement, CONTRACTOR does certify that CONTRACTOR has been duly authorized by delivery of this Agreement and all other documents, certificates, agreements, consents and receipts, and to take any and all other actions of any kind whatsoever in order to accomplish the purposes and undertakings of this Agreement

IN WITNESS WHEREOF	, the parties here	eto have made and executed this
Agreement on the respective	dates under each	ch signature: CITY OF HALLANDALE
BEACH through its authoriza	ition to execute s	same by COMMISSION action on the
day of	, 20	, signing by and through its City
Manager, duly authorized to	execute same, a	nd
		, signing by and
(name	of contractor)	
through its		duly authorized to execute same.
(title of authorized	d officer)	

Director

	<u>CITY</u>	
ATTEST:	CITY OF HALLANDALE BI	EACH
City Clerk	By Mark Antonio, City N	Manager
	day of	_, 20
Approved as to form by City Attorney By David Jove, City Attorney		
Approved as to insurance requirements, and insurance documentation:		
Risk Management Division		

CONTRACTOR MUST EXECUTE THIS CONTRACT AS INDICATED BELOW. USE CORPORATION OR NONCORPORATION FORMAT, AS APPLICABLE.

(If incorporated sign below).

	CONTRACTOR
ATTEST:	(Name of Corporation)
(Secretary)	By (Signature and Title)
(Corporate Seal)	(Type Name and Title Signed Above)
	day of, 20
(If not incorporated sign below).	
	CONTRACTOR
WITNESSES:	
	(Name)
	By (Signature)
	(Typed Name Signed Above)
	day of, 20

CITY REQUIRES THREE (3) FULLY EXECUTED CONTRACTS.

00608. **FORM CERTIFICATE OF INSURANCE**

A FORM CERTIFICATE OF INSURANCE WILL BE ATTACHED HERE.

BID #FY2010-2011-006

REVISED: 8-8-11

00609. FORM OF PERFORMANCE AND PAYMENT BOND

KNOWN ALL MEN BY TH	IESE PRESENTS:
That we	
as Principal, hereinafter ca	alled CONTRACTOR, and, as
Surety, are bound to the Called CITY in the amount	City of Hallandale Beach, Florida, as Obligee, hereinaften of
Dollars (\$) for the payment whereof CONTRACTOR and Surety
	rs, executors, administrators, successors and assigns,
•	CTOR has by written agreement entered into a Contract
Bid/Contract No.:BID #F	Y2010-2011-006 awarded the
day of, 20	, with CITY for
	for which Contract is by reference made a part hereof
and is hereafter referred to	o as the Contract;

THE CONDITION OF THIS BOND is that if the CONTRACTOR:

- Performs the Contract between the CONTRACTOR and the CITY for Utilities & Engineering Improvements for the <u>250,000 Gallon Bluesten Park Elevated</u> <u>Tank and 500,000 Gallon Beach Elevated Tank</u>, the Contract being made a part of this Bond by reference, at the times and in the manner prescribed in the Contract; and
- 2. Promptly makes payments to all claimants, as defined in Section 255.05(1), Florida Statutes, supplying CONTRACTOR with labor, materials, or supplies, used directly or indirectly by CONTRACTOR in the prosecution of the work provided for in the Contract; and
- Pays CITY all losses, damages, expenses, costs and attorneys fees including appellate proceedings, that CITY sustains because of default by CONTRACTOR under the Contract: and
- 4. Performs the guarantee of all work and materials furnished under the Contract for the time specified in the Contract, then this Bond is void; otherwise it remains in full force.

BID #FY2010-2011-006

REVISED: 8-8-11

This Bond shall continue in effect for one year after completion and acceptance of the work. The Surety hereby waives notice of and agrees that any changes in or under the Contract Documents and compliance or noncompliance with any formalities connected with the Contract or the changes does not affect Surety's obligation under this Bond.

Whenever CONTRACTOR shall be, and declared by CITY to be, in default under the Contract, the CITY having performed CITY'S obligations thereunder, the surety may promptly remedy the default, or shall promptly:

- 4.1. Complete the Contract in accordance with its terms and conditions; or
- 4.2. Obtain a bid or bids for completing the Contract in accordance with its terms and conditions, and upon determination by Surety of the lowest responsible Bidder, or if the CITY elects, upon determination by the CITY and Surety jointly of the lowest responsible Bidder, arrange for a Contract between such Bidder and CITY, and make available as work progresses (even though there should be a default or a succession of defaults under the Contract or Contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the balance of the Contract price; but not exceeding, including other costs and damages for which the Surety may be liable hereunder, the amount set forth in the first paragraph hereof. The term "balance of the Contract price", as used in this paragraph, shall mean the total amount payable by CITY to CONTRACTOR under the Contract and any amendments thereto, less the amount properly paid by CITY to CONTRACTOR.

No right of action shall accrue on this Bond to or for the use of any person or corporation other than the CITY named herein and those persons or corporations provided for in Section 255.05, Florida Statutes, or their heirs, executors, administrators or successors.

CITY OF HALLANDALE BEACH

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Any action under this Bond must be instituted in accordance with the Notice and Time Limitations provisions prescribed in Section 255.05(2), Florida Statutes.

Signed and sealed this	day of, 20	
ATTEST:	<u> </u>	lame of Corporation)
(Secretary)	By(S	ignature and Title)
(Corporate Seal)		
	(Type Name and Title	Signed Above)
IN THE PRESENCE OF:	INSURANCE COMPAN	NY:
	By Agent and Attor	ney-in-Fact
	Address: (Street)	
	(City/State/Zip Code)	
	Telephone No.:	

FORM OF CERTIFICATE AND AFFIDAVIT FOR BONDS \$500,000 00622. **OR LESS**

TO: CITY OF HALLANDALE BEACH, FLORIDA

RE: BID NUMBER: FY2010-2011-006 - ELEVATED WATER STORAGE TANKS **REPAIRS PROJECT**

Bidder:		
Name:		
Address		
City/State/Zip:		
Telephone No.		
This is to certify that, in accordance with Chapter 85-104, Laws of Florida (HB 1266), the insurer named above:		
Holds a Certificate of Authority authorizing it to write Surety Bonds in the State of Florida.		
Holds a current valid Certificate of Authority issued by the United States Department of the Treasury under Section 9304 to 9308 of Title 31 of the United States Code.		
(Date Signed)	Agent and Attorney-in-Fact	

AFFIDAVIT

STATE OF FLORIDA)
)SS. COUNTY OF)
BEFORE ME this day personally appeared, Agent and Attorney-in-Fact of, who, being duly sworn, executed the foregoing instrument and acknowledged to and before me the truthfulness and accuracy of the statements in the foregoing instrument.
Signature of Person Making Affidavit
SWORN TO AND SUBSCRIBED before me this day of, 20
Notary Public State of Florida
My commission expires:

BID #FY2010-2011-006

CITY OF HALLANDALE BEACH

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REVISED: 8-8-11

00825. CERTIFICATE OF SUBSTANTIAL COMPLETION:

PROJECT: CITY ENGINEER:

(name, address)

BID/CONTRACT NUMBER:

TO (CITY): CONTRACTOR:

CONTRACT FOR:

NOTICE TO PROCEED DATE:

DATE OF ISSUANCE:

PROJECT OR DESIGNATED PORTION SHALL INCLUDE:

The work performed under this Contract has been reviewed and found to be substantially complete. The Date of Substantial Completion of the Project or portion thereof designated above is hereby established as which is also the date of commencement of applicable warranties required by the Contract Documents, except as stated below.

DEFINITION OF DATE OF SUBSTANTIAL COMPLETION

The Date of Substantial Completion of the work or designated portion thereof is the date certified by the CITY ENGINEER when construction is sufficiently complete, in accordance with the Contract Documents, so the CITY can occupy or utilize the work or designated portion thereof for the use for which it is intended, as expressed in the Contract Documents.

A list of items to be completed or corrected, prepared by the CONTRACTOR and verified and amended by the CITY ENGINEER, is attached hereto. The failure to include any items on such list does not alter the responsibility of the CONTRACTOR to complete all work in accordance with the Contract Documents. The date of commencement of warranties for items on the attached list will be the date of final payment unless otherwise agreed in writing.

CONTRACTOR	BY	DATE
	ll complete or correct the wor bove Date of Substantial Con	rk on the list of items attached npletion.
CITY ENGINEER	BY	DATE
	City's Project Manager, accep antially complete and will ass	ots the work or designated nume full possession thereof at
on	(time)	
	(date).	
CITY OF HALLANDALE	EBEACH BY CITY MANAGE	R DATE

The responsibilities of the CITY and the CONTRACTOR for security, maintenance, heat, utilities, damage to the work and insurance shall be as follows:

00826. FINAL CERTIFICATE OF PAYMENT:

PROJECT:	CITY EN	GINEER:
(name, address)	BID/CON	ITRACT NUMBER:
TO (CITY):	CONTRA	ACTOR:
	CONTRA	ACT FOR:
	NOTICE	TO PROCEED DATE:
DATE OF ISSUANCE:		
certifies that the Work ha	is Contract has been reviewed as been completed in accordan d under the terms and condition	ce with the provision of this
CITY ENGINEER	BY	DATE
•	ITY ENGINEER and the City's te and will assume full possess	
	(time)	
on	(date)	
CITY OF HALLANDALE	BEACHBY CITY MANAGER	DATE

00830. **FORM OF FINAL RECEIPT:**

The following for will be used to show recein	ot of final payment for this Contract}.	
FINAL RECEIPT FOR CONTRACT NO		
Received this day of from City of Hallandale Beach, the sum of Dollars (\$) as full CONTRACTOR for all work and materials fo	, 20, I and final payment to the r the Project described as:	
This sum includes full and final payment for a incidentals.	all extra work and materials and all	
The CONTRACTOR hereby indemnifies a from all liens and claims whatsoever growing		
The CONTRACTOR hereby certifies that furnishing materials or supplies for the said in Contract have been paid in full.		
The CONTRACTOR further certifies that all taxes imposed by Chapter 212, Florida Statutes (Sales and Use Tax Act), as amended, have been paid and discharged.		
{If incorporated sign below}		
CONTRACTOR		
ATTEST:	(Name)	
	(**************************************	
(Secretary)	By:	
	(Title)	
(CORPORATE SEAL)		
	Date:	

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{If not incorporated sign below}

CONTRACTOR WITNESS: (Name) By: _____ Date: _____

00850. DRAWINGS & EXHIBITS INDEX

PAGE	INDEX	DESCRIPTION
		INSPECTION REPORT
	EXHIBIT [A]	250,000 GALLON TANK BLUESTEN PARK PROJECT
	EXHIBIT [B]	500,000 GALLON TANK BEACH PROJECT
	EXHIBIT [C]	DRAWINGS
Α	10-0781-R1	TANK NOMENCLATURE – BLUESTEIN PARK TANK
В	10-0781-R2	TANK NOMENCLATURE – BEACH TANK
С	10-0781-R3	LADDER DETAILS
D	10-0781-R4	TYPICAL MANWAY
E	10-0781-R5	NEW INLET PIPE
F	10-0781-R6	ANCHOR BOLT REPAIR
G	10-0781-R7	OVERFLOW EXTENSION
Н	10-0781-R8	ACCESS TUBE REPAIR
I	10-0781-R9	EARPLATE REPAIR

00900. ADDENDA AND MODIFICATIONS:

If any addenda are issued, the City will attempt to notify prospective Bidders. Addenda to this solicitation will be posted on the Division's webpage http://fl-hallandalebeach2.civicplus.com/index.aspx?nid=417.

It is the Bidder's responsibility to check the website or contact the General Services/Purchasing Department prior to the proposal submittal deadline to ensure that the Bidder has a complete bid package.

01000. <u>TECHNICAL SPECIFICATIONS</u>

CITY OF HALLANDALE BEACH ELEVATED WATER STORAGE TANKS REPAIR

SECTION 1: SCOPE OF WORK

The CONTRACTOR shall furnish all labor, material, equipment, tools, personnel, incidentals, maintenance of traffic, mobilization and transportation which are necessary for the proper layout and completion of the work, as specified. All work under this contract is within the City of Hallandale Beach property. Project addresses is referenced as Project [A] 501 SE 1 Avenue, Hallandale Beach, Florida and Project [B] 2801 East Hallandale Beach Florida. The work includes but is not limited to:

- Maintenance of Traffic
- Replacement of five (5) sway rods (wind rods)
- > Replacement of nine (9) riser rods
- Replacement of column ladder and roof ladder
- Replacement of roof hatch
- > Removal of existing vents and replace with 24" vent
- Painting of exterior and interior elevated water tank
- ➤ Coordination with AT&T and Verizon for removal and reinstallation of antenna equipment located on the tower
- Install roof vents
- Replace roof hatch
- > Replace interior ladder
- > Replace overflow pipe
- Install patch plates on pillars
- Install cable mounts.
- Shop Drawings

CONTRACT AWARD:

This Bid consists of two (2) project parts for bidding: Project A, Project B or Project C which consists of scope of work to be completed in the consecutive order of completion of Project A and then completion of Project B. The City may award a contract to one or more firms being the lowest responsive bidder to Project [A] or Project [B] or Project [C] in the best interest of the City. Therefore, award of each project may result in the City awarding one or more firms.

SECTION 2: LOCATIONS:

Project addresses are referenced as Project [A] 250,000 Gallon Elevated Tank at Bluesten Park 501 SE 1 Avenue, Hallandale Beach, Florida and Project [B] 500,000 Gallon Elevated Tank Beach Tank 2801 East Hallandale Beach Florida.

SECTION 3: GENERAL NOTES:

The following listed documents are incorporated by reference and the applicable portions thereof are made a part of this bid.

3.01 DESCRIPTION:

A. The scope of this section defines the work and materials included in each bid item in the specifications for the rehabilitation and repainting of two Potable Water Elevated Storage Tanks Project [A] Bluesten Park and Project [B] Beach Tank for the City of Hallandale Beach, Florida (hereinafter "CITY"). Payment will be made based on the specified items included in the description in this section for each bid item.

SECTION 4: PROJECT [A] BLUESTEN PARK TANK 250,000 GALLON TANK DESCRIPTION:

4.01 The Bluesten Park Tank is a 250,000-gallon, multi-column, double-ellipsoidal, welded, steel tank. No nameplate was found on the tank. City personnel provided basic height dimensions for the tank. The following information was observed:

Manufacturer: appears to be Chicago Bridge & Iron

Capacity: 250,000 Gallons

Year Built: 1960's

Height to L.W.L: approx. 100'-0"

Number of Panels: 3
Inlet/Outlet Pipe Size: 10"

4.02 The overall project consists of providing all labor, materials, supervision, power, equipment and supplies for mechanical repairs and repainting of the elevated tanks included in this specification.

4.03 INSPECTION REPORT:

Bluesten tanks were inspected in October 2010 by Tank Engineering And Management Consultants, Inc. Bidders should familiarize themselves with the report and the condition of the structures at the time of the inspection. The inspection was performed to determine the condition of the structures and to determine the condition of the coatings. The reports describe conditions existing at the time of the inspection. THE REPORTS
HAVE BEEN INCLUDED SO THAT FIRMS ARE AWARE OF THE EXTENSIVE
REPAIR THAT NEEDS TO BE PERFORMED.

4.04 SUBMITTALS:

- A. Pre-Job Submittals
 - 1) Before mobilizing to the jobsite, the CONTRACTOR shall submit to the ENGINEER for the ENGINEER'S approval, a schedule of values allocated to various portions of the Work, prepared in such form and supported by such data to substantiate its accuracy as the ENGINEER may require. This schedule, unless objected to by the ENGINEER, shall be used as a basis for reviewing the CONTRACTOR'S application for Payment. However, the CONTRACTOR shall provide a realistic schedule of values and CONTRACTOR shall be prohibited from assigning a disproportionately high allocation to early phases of the work (also commonly called "front-end loading"). It shall be a material breach of this Agreement if Contractor front-end loads the Agreement. Mobilization and demobilization will NOT be paid as

a separate line item. The CITY will not pay for materials on site until they are applied or installed on the tank.

- 2) Prior to the commencement of any work here under the CONTRACTOR shall submit the following plans, or proof that such plans are in effect:
- 3) <u>Hazardous Communication Plan</u>: CONTRACTOR agrees to communicate to his employees all information regarding chemicals, substances and other hazards to which CONTRACTOR'S employees forseeably could be exposed while performing work on the premises, and to properly inform, educate and train all employees performing work hereunder as to all applicable Safety and Health laws and Regulations including, but not limited to, the Hazard Communication Standard, 29 CFR, Part 1910.1200 issued by Occupational Safety and Health Administration, U.S. Department of Labor.
- Lock-Out/Tag-Out Plan: CONTRACTOR shall provide a plan, locks and tags for locking out and tagging of equipment as may be necessary.
- 5) <u>Health & Safety Policy</u>: CONTRACTOR shall submit a copy of the Health & Safety Policy, and take the necessary steps to ensure that subcontractors, if any, comply with all safety policies, all Federal and State job safety and health regulations including, but not limited to, the Hazard Communication Standard, 29 CFR, Part 1910.1200.
- 6) Confined Space Entry: CONTRACTOR shall submit a plan for Confined Space Entry in accordance with 29 CFR 1910.146. CONTRACTOR shall also provide confined space entry attendant(s), and LEL/O₂ monitor as required by the Confined Space Entry plan.

7) Hurricane Preparedness Plan:

- a) Within thirty (30) days of the date of Notice to Proceed, the CONTRACTOR shall submit to the ENGINEER/CITY a Hurricane Preparedness Plan. The plan should outline the necessary measures that the CONTRACTOR proposes to perform at no additional cost to the CITY in case of a hurricane warning.
- b) In the event of inclement weather, or whenever the ENGINEER/CITY shall direct, the CONTRACTOR will, and will cause the Subcontractors to, protect carefully the work and materials against damage or injury from the weather. If, in the opinion of the ENGINEER/CITY, any portion of work or materials have been damaged or injured by reason of failure on the part of the CONTRACTOR or any Subcontractors to

so protect the work, such work and materials shall be removed and replaced at the expense of the CONTRACTOR.

c) Prior to mobilizing on site, the CONTRACTOR shall submit a plan to the CITY for satisfying damage claims on surrounding property such as buildings, automobiles, landscaping, sidewalks, etc., as a result of paint spatter, abrasive blast materials, mechanical damage, etc.

B. Post-Job Submittals

- Drawings shall be supplied to the ENGINEER/CITY upon submittal of final invoice. CONTRACTOR-supplied as-built drawings shall include four (4) copies, one (1) reproducible for each drawing, and a disk copy using ACAD or other format as approved by the ENGINEER/CITY.
- 2) Reference each section of these specifications for additional submittal requirements.

4.05 SITE CONDITIONS:

- A. The CITY will provide a staging area within the confines of each site.
- B. Equipment and material required for daily work may be stored at the elevated water storage tanks but cannot unreasonably encumber the job site with material or equipment. Storage will be at the risk of the CONTRACTOR. No responsibility will be assumed by the CITY or the ENGINEER for the security of stored material and equipment. All hazardous material must be stored in locked containers.
- C. Coordination of access to the elevated water storage tanks must be arranged with the CITY prior to accessing the construction area.
- D. At the completion of this project, the areas surrounding the water tanks shall be restored to a condition equal to or better than conditions prior to this project. Any grass, shrubbery, trees, etc., damaged by CONTRACTOR personnel or equipment, or as a result of work performed shall be replaced at the CONTRACTOR's expense. All damaged grass shall be replaced with sod of the same type as the existing grass.
- E. The CONTRACTOR shall be responsible for any damage to any surrounding structures such as buildings, cars, landscaping, sidewalks, etc., as a result of paint spatter, blast abrasive, mechanical damage, etc. All damage shall be repaired to the satisfaction of the property owner making the claim at no additional cost to the CITY or ENGINEER.
- F. The Bluesten Park tank is equipped with cell phone antenna and related equipment. The CITY is working in conjunction with the Carriers to re-locate the antennae during this work. The CONTRACTOR shall take every precaution to avoid damaging any antennae and/or related equipment.

4.06 **GENERAL PROCEDURES FOR WORK TO BE PERFORMED:**

- All fabrication, installation, abrasive blasting, and coating or lining application shall be done by experienced personnel. The awarded contractor shall be able to provide proof of five successful projects as prime contractor on projects of similar size, completed in the last five years. Similar projects shall be a minimum of 250,000-gallon tank size and shall include full containment.
- B. The CONTRACTOR shall furnish all labor, materials, equipment, tools, services and incidentals to complete all work required by these specifications and as shown on the drawings.
 - 1) The CONTRACTOR shall perform the work complete, in place, and ready for continuous service, and shall include, repairs, testing, permits, cleanup, replacements, and restoration required as a result of damages caused during this construction.
 - 2) All materials, equipment, skills, tools and labor which are reasonably and properly inferable and necessary for the proper completion of the work in a substantial manner and in compliance with the requirements stated or implied by these Specifications or Drawings shall be furnished and installed by the CONTRACTOR without additional compensation, whether specifically indicated in the Contract Documents or not.
 - 3) The CONTRACTOR shall comply with all Municipal, County, State, Federal, and other codes which are applicable to the proposed work and all related activities.

4.07 **SUBSTANTIAL COMPLETION:**

- The work, or any separable parts thereof, identified herein shall be deemed Substantially Completed at such time that all incidental requirements necessary to enable the CITY to continuously and successfully utilize the work or separable part thereof, for the purposes of which it is intended are completed.
- B. The Contract Times of Substantial Completion for the work shall be as indicated.

4.08 FINAL COMPLETION:

- Project shall be deemed fully completed when the designated Coating Inspector, CITY Inspectors, and the Engineer agree that all work required by this specification has been completed satisfactorily to the intent of these documents.
- B. The parties mentioned above shall make a final inspection walk-through and submit a written acceptance to the contractor before final payment is made.

4.09 **WORK SEQUENCE:**

Only one tank shall be out of service at any time. The first tank shall be complete and approved by the CITY and the ENGINEER, prior to beginning any work on the second tank, unless prior written approval is obtained from the CITY.

B. Construct work in stages to accommodate the CITY use of the premises during the construction period; coordinate the construction schedule and operations with the CITY representative.

4.10 CONSTRUCTION AREAS:

- A. CONTRACTOR shall limit his use of the construction areas for work and storage, to allow for:
 - 1. Work by other Contractors
 - 2. CITY use
- B. CONTRACTOR shall assume full responsibility for the protection and safekeeping of all materials and equipment under this contract, stored on site.
- C. Move and store products under CONTRACTOR'S control, which interfere with operations of the CITY or separate CONTRACTORS.
- D. Obtain and pay for the use of additional storage or work areas needed for operations.

4.11 CITY OCCUPANCY:

- A. The CITY will have full access to and use of all existing utilities during the entire period of construction for the conduct of its normal operations. Cooperate with the CITY representative in all construction operations to minimize conflict, and facilitate CITY usage.
- B. CONTRACTOR shall at all times conduct his operations as to insure the least inconvenience to the facility.

4.12 **INTENT**:

- A. All work called for in the specifications applicable to this Contract, but not shown on the Plans in their present form, or vice versa, shall be of like affect as if shown or mentioned in both. Work not specified in either the plans or in the Specifications, but involved in carrying out their intent or in the complete and proper execution of the work, is required and shall be performed by the CONTRACTOR as though it were specifically delineated or described.
- B. The apparent silence of the specifications as to any detail, or the apparent omission from them of a detailed description concerning any work to be done and materials to be furnished, shall be regarded as meaning that only the best general practice is to prevail and that only material and workmanship of the best quality is to be used, and interpretation of these specifications shall be made upon that basis.
- C. The inclusion of the General Requirements (or work specified elsewhere), in the General part of the specifications is only for the convenience of the CONTRACTOR, and shall not be interpreted as a complete list of related specification sections.

4.13 DISCREPANCY BETWEEN DRAWINGS AND SPECIFICATIONS:

In case of any discrepancy between the drawings and specifications, the more stringent requirement shall apply. The CONTRACTOR will not be held responsible for the discovery of such discrepancy, but any work done on the item involved after such discovery, and prior to authorization by the ENGINEER, will be done at the CONTRACTOR'S risk and expense.

4.14 PRE-CONSTRUCTION CONFERENCE:

- A. A joint meeting shall be held with representatives of the CONTRACTOR and major subcontractors, the ENGINEER, the CITY, and other invited parties or government agencies which may be affected by or have jurisdiction over the Project.
- B. This meeting is intended to introduce the various key personnel from each organization and discuss the Contract Documents, the start of the construction, order of work, labor and legal requirements, insurance requirements, names of major subcontractors, method of payment, shop drawing requirements, protection of existing facilities and other pertinent items associated with the project. The CONTRACTOR shall bring to this conference six (6) copies of a proposed work schedule.

END OF SECTION FOUR

SECTION 5: SUBMITTAL PROCEDURES:

5.01 DESCRIPTION:

This section specifies the procedures for submittals for the work to be performed in accordance with these specifications. Submittals covered by this section include manufacturers' information, shop drawings, test results, samples, requests for substitutions, and miscellaneous work-related submittals. Submittals shall also include, but not be limited to, all mechanical, electrical and electronic equipment and systems, materials, reinforcing steel, fabricated items, and piping and conduit details. The CONTRACTOR shall furnish all drawings, specifications, descriptive data, certificates, samples, test methods, schedules, and manufacturer's installation and other instructions as specifically required in the contract documents to demonstrate fully that the materials and equipment to be furnished and the methods of work comply with the provisions and intent of the contract documents.

5.02 CONTRACTOR'S RESPONSIBILITIES:

A. The CONTRACTOR shall be responsible for the accuracy and completeness of the information contained in each submittal and shall assure that the material, equipment, or method of work shall be as described in the submittal. The CONTRACTOR shall verify that all features of all products conform to the specified requirements. Submittal documents shall be clearly edited to indicate only those items, models, or series of equipment, which are being submitted for review. All extraneous materials shall be crossed out or otherwise obliterated. The CONTRACTOR shall ensure that there is no conflict with other submittals and notify the ENGINEER/CITY in each case where his submittal may affect the work of another CONTRACTOR or the CITY. The CONTRACTOR shall coordinate submittals between his SUB-CONTRACTOR'S and suppliers.

- B. The CONTRACTOR shall coordinate submittals with the work so that work will not be delayed. He shall coordinate and schedule different categories of submittals, so that one will not be delayed for lack of coordination with another. No extension of time will be allowed because of failure to properly scheduled submittals. The CONTRACTOR shall not proceed with work related to a submittal until the submittal process is complete. This requires that submittals for review and comment shall be returned to the CONTRACTOR stamped "No Exceptions Taken" or "Make Corrections Noted."
- C. The CONTRACTOR shall certify on each submittal document that he has reviewed the submittal, verified field conditions, and complied with the contract documents.
- D. The CONTRACTOR may authorize in writing a material or equipment supplier to deal directly with the ENGINEER/CITY with regard to a submittal. These dealings shall be limited to contract interpretations to clarify and expedite the work.

5.03 CATEGORIES OF SUBMITTALS:

- A. GENERAL
 - 1) Submittals fall into two general categories: submittals for review and comment, and submittals that are primarily for information only. Submittals, which are for information only, are generally specified as PRODUCT DATA of the applicable specification sections.
 - 2) At the beginning of work, the CONTRACTOR will furnish the ENGINEER/CITY list of those submittals specified in the project manual. Two separate lists will be provided: submittals for review and comment and product data (submittals) for information only.
- B. SUBMITTALS FOR REVIEW AND COMMENT:

All submittals except where specified to be submitted as product data information only shall be submitted by the CONTRACTOR to the ENGINEER/CITY for review and comment.

C. <u>SUBMITTALS (PRODUCT DATA) FOR INFORMATION ONLY:</u>
Where specified, the CONTRACTOR shall furnish submittals (product data) to the ENGINEER/CITY for information only.

5.04 SUBMITTAL PROCEDURES:

- A. Within 15 days after award of Contract, the CONTRACTOR shall submit a list of shop drawings by Specification Section, and include a list of dates submittals are expected to be made.
- B. Deliver submittals at established times before the dates approved submittals will be needed. Verify with the ENGINEER/CITY of the required timing and dates.
- C. Submit shop drawings electronically in AutoCAD Release 2000 or a later format, or as an alternate, one reproducible and three prints, as directed by the ENGINEER/ CITY.

- D. In addition to the usual, or normal, shop drawings, submit the following for approval when requested:
 - 1) Sequence of operations.
- E. Submit three samples of materials, unless otherwise specified.

5.05 RESUBMISSION REQUIREMENTS:

- A. Shop Drawings:
 - 1) Review drawings and indicate revision date as required, and resubmit as specified for initial submittal.
 - 2) Indicate on drawings any changes that have been made other than those requested by the ENGINEER/CITY.
- B. Product data and samples: Submit new data and samples as required for first submittal.

5.06 CONTRACTOR'S RESPONSIBILITIES:

- A. Review shop drawings, product data, and samples prior to submission to the ENGINEER/CITY.
- B. Verify field measurements, field construction criteria, catalog numbers, and similar data.
- C. Coordinate each submittal with work of the Project and Contract Documents.
- D. CONTRACTOR'S responsibility for errors and omissions in submittals or deviations from Contract Documents is not relieved by the ENGINEER/CITY'S review of submittals.
- E. CONTRACTOR'S responsibility for deviations in submittals from requirements of Contract Documents is not relieved by the ENGINEER/CITY'S review of submittals, unless the ENGINEER/CITY gives written acceptance of specific deviations.
- F. Notify the ENGINEER/CITY in writing of deviations from requirements of Contract Documents at time submittals are made.
 - 1) A "deviation" shall be construed to mean a minor change to the sequence indicated by the drawings or specification.
 - 2) A "deviation" is not intended to allow substitutions or product options.
 - 3) In addition to notifying the ENGINEER/CITY in writing of deviations, circle deviations on shop drawings.
- G. Do not begin work that requires submittals until submittals have been returned with the ENGINEER/CITY'S stamp and initials or signature indicating review and approval.

5.07 CITY'S RESPONSIBILITIES:

- A. Review submittals with reasonable promptness on basis of design concept of project and information contained in Contract Documents.
 - 1) Attention is directed to the fact that the ENGINEER/CITY'S review is only to check for general conformance with the design concept of the project and general compliance with Contract Documents. The ENGINEER/CITY assumes no responsibility for correctness of dimensions, details, quantities, or procedures shown on shop drawings or submittals.
 - 2) Omission in shop drawings of any materials indicated in Contract Drawings, mentioned in Specifications, or required for proper execution and completion of work, does not relieve the CONTRACTOR from responsibility for providing such materials as indicated in Contract Documents.
 - 3) Approval of a separate or specified item does not necessarily constitute approval of an assembly in which this item functions.
- B. Affix stamp and initials or signature acknowledging review of submittal as follows:
 - 1) No exceptions taken.
 - 2) Make corrections noted. Do not resubmit.
 - 3) Make corrections noted. Resubmit.
 - 4) Rejected. Resubmit in accord with Contract Documents.
- C. Return submittals to CONTRACTOR for distribution.

END OF SECTION FIVE

SECTION 6: WARRANTIES AND BONDS:

6.01 GUARANTEE:

- A. All work covered under these specifications shall be guaranteed for a period of one (1) year after completion and acceptance of the work. A first anniversary inspection will be scheduled by the CONTRACTOR, during the twelfth month following acceptance of the work. A report shall be furnished to the CITY describing the condition of the paint system and other work covered under this Contract. Tank draining shall be coordinated with the CITY representative. Any latent defects found during this inspection shall be promptly repaired by the CONTRACTOR. Any location where coats of paint have peeled off, bubbled or cracked, and any location where rusting is evident, shall be considered a failure of the paint system. The CONTRACTOR shall make repairs at all points where failures are observed as per the Technical Specifications, Section 09900 PART-3. The CONTRACTOR shall submit a schedule and plan outlining the repair procedures.
- **B.** Failure on the part of the CONTRACTOR to schedule this warranty inspection will not relieve him of warranty responsibility. Any defects found by the CITY, after the normal warranty period, will be assumed to have occurred during the time the warranty was in effect.

6.02 COATING & LINING:

The CONTRACTOR shall comply with the above section and also shall provide Manufacturer's standard warranty for all materials and labor for a period of one (1) year after the date of final acceptance by the CITY.

6.03 SUBMITTALS:

- A. Assemble warranties, bonds and service and maintenance contracts, executed by each of the respective manufacturers, suppliers, and subcontractors.
- B. Number of original signed copies required: six (6) each.
- **C.** Table of Contents. Neatly typed in orderly sequence.
- **D.** Provide complete information for each item:
 - 1) Product or work item.
 - 2) Firm, with name of principal, address and telephone number.
 - 3) Scope.
 - 4) Date of beginning of warranty, bond, or service and maintenance contract.
 - 5) Duration or warranty, bond, or service and maintenance contract.
- **E.** Provide the following information for CITY personnel:
 - 1) Proper procedure in case of failure.
 - 2) Instances which might affect the validity of warranty or bond.
 - 3) Contractor, name of responsible principal, address and telephone number.

6.04 FORM OF SUBMITTALS:

Prepared in duplicate packets.

Format:

- 1. Size 8-1/2-inches x 11-inches, punch sheets for standard 3-post binder.
- 2. Fold larger sheets to fit into binders.
- B. Cover: Identify each packet with typed or printed title "WARRANTIES AND BONDS." List:
 - 1) Title of Project
 - 2) Name of Contractor
 - 3) Tank Name
 - 4) Tank Address
- C. Binders: Commercial quality, three-post binder, with durable and cleanable plastic covers and maximum post width of 2-inches. If more than one volume, identify volume number on spine and cover.

6.05 WARRANTY SUBMITTAL REQUIREMENTS:

A. For all major pieces of equipment, submit a warranty from the equipment manufacturer. The manufacturer's warranty period shall be concurrent with the CONTRACTOR'S for one (1) year, unless otherwise specified, commencing at the time of final acceptance by the CITY.

B. The CONTRACTOR shall be responsible for obtaining certificates for equipment warranty for all major equipment which has a 1 HP motor or which lists for more than \$1,000. The ENGINEER reserves the right to request warranties for equipment not considered to be "major" in the CONTRACTOR'S one-year warranty period even though certificates of warranty may not be required.

END OF SECTION SIX

SECTION 7: DISINFECTION

7.01 **DESCRIPTION**:

This section specifies post-job cleaning procedures for both elevated water storage tanks and new pipe section included in this specification.

7.02 QUALITY ASSURANCE:

- A. This section references the following documents. They are a part of this section as specified and modified. In case of conflict between the requirements of this section and those of the listed documents, the requirements of this section shall prevail.
- B. REFERENCE TITLE: AWWA C652 Disinfection of Water Storage Facilities.
- C. REFERENCE TITLE: AWWA C651 Disinfection of Water Mains

7.03 SUBMITTALS:

INFORMATION TO BE PROVIDED: Record of Compliance as described in AWWA C651 and C652.

7.04 DISINFECTING:

- A. After the tank has been painted and the interior surfaces have thoroughly dried, the CONTRACTOR shall remove all visible dirt and contaminating materials. The Interior of the tank shall be disinfected in accordance with Chlorination Method 2 of AWWA C652. The CONTRACTOR shall furnish all of the chlorine required.
- B. During the installation, the CONTRACTOR shall remove all visible dirt and contaminating materials from each pipe section.
- C. The Interior of the piping system shall be disinfected in accordance with one of the acceptable methods listed in AWWA C651.

7.05 TESTING:

A. The CONTRACTOR shall be responsible for obtaining proper disinfection as determined by bacteriological testing. Two (2) consecutive samples from the tank are required to pass the bacterial tests for the tank to comply with these disinfection requirements. These tests shall be conducted by the CITY laboratory at the CITY's expense.

- B. The CONTRACTOR shall pay all expenses and costs associated with additional sampling and analysis for failure of bacteriological tests including costs associated with additional filling and disinfecting.
- C. Water for filling the tank after the initial disinfection will be provided by the CITY. If the bacteriological testing shows the presence of coliform bacteria, the tank shall be disinfected again. The CONTRACTOR shall reimburse the CITY for the water required to fill the tank after the first filling at the rate of \$1.792 per 1,000 gallons.

END OF SECTION SEVEN

SECTION 8: PAINTING

8.01 **DESCRIPTION**:

- A. This section pertains to the painting of the Elevated Water Tanks. This item includes adding a logo to the Bluesten Park Tower.
- B. All surfaces encompassed by this specification shall be cleaned, prepared and coated with the designated paint system as specified herein. All coating shall be applied in strict accordance with the manufacturer's instructions.

8.02 RELATED SECTIONS:

- A. Section 4 Summary of Work
- B. Section 5 Submittal Procedures
- C. Section 6 Warranties And Bonds

8.03 REFERENCED STANDARDS:

SSPC Steel Structures Painting Council

8.04 QUALITY ASSURANCE:

- A. INSPECTION PROGRAM
 - Throughout the duration of the work, a formalized inspection program will be developed and maintained by the CITY/ENGINEER. The CONTRACTOR will be familiarized with the inspection program and the Project line of authority at the Preconstruction Conference.
 - 2) Once the CONTRACTOR has been familiarized with this program, it will be the CONTRACTOR'S responsibility to provide the CITY, through the ENGINEER, with clear, accurate information necessary for the required inspection reports.
 - The CONTRACTOR will be responsible for filling out a daily inspection report form this form will be furnished by the ENGINEER. No request for payment will be processed unless accompanied by completed inspection report forms. Inspections will be performed by the ENGINEER or his designee. It is expected that information furnished on the CONTRACTOR'S inspection reports will coincide with the information recorded during the ENGINEER'S inspections.

- 4) It is the CONTRACTOR'S responsibility to notify the INSPECTOR when an area is ready for inspection. No work will be approved until the INSPECTOR has performed all required tests and inspections.
- The CONTRACTOR shall provide for the INSPECTOR all necessary rigging required to complete the inspection and testing operations. The CONTRACTOR shall assist the INSPECTOR in making all required tests and inspections. Deficient areas such as pinholes, holidays, embedded contamination, sags, dry spray, mechanical damage, high / low mils, shall be repaired to meet the requirements of this specification.
- 6) The CITY will provide part-time coating inspection for the duration of the project. The INSPECTOR shall be on site at critical points in the operation including holiday tests and touch-up work.

B. INSPECTION AUTHORITY:

- The ENGINEER has ultimate responsibility for Contract administration and inspection for this project. Field inspection responsibilities will be assigned to the INSPECTOR.
- 2) The INSPECTOR can stop the job if the CONTRACTOR is deviating from the specifications. The CONTRACTOR'S field supervisor shall be advised verbally to stop work and the CONTRACTOR'S office shall be faxed a notice that work has been stopped.
- 3) Each step of the construction is subject to approval by the INSPECTOR prior to proceeding with a subsequent step.
- 4) During the progress of the work and up to the date of final acceptance, the CONTRACTOR shall at all times afford representatives of the CITY, County, State, and Federal agencies having jurisdiction, every reasonable, safe, and proper access for observation of the work done or being done at the site and also at the place of manufacture or preparation.

C. TEST EQUIPMENT FURNISHED BY CONTRACTOR:

- The CONTRACTOR will have the following test equipment available for use by the INSPECTOR at the job site at all times during the progress of the work:
 - a) Sling Psychrometer
 - b) Surface Temperature Gauge
 - c) Wet Film Thickness Gauge
 - d) Dry Film Thickness Gauge (Properly Calibrated)
 - e) National Bureau of Standards thickness plates.
 - f) SSPC VIS-1- Pictorial Surface Preparation Standard
 - g) Holiday Detector. Low voltage type such as Tinker & Rasor Mode
 - h) M-1, Series 9533
 - i) Keane-Tator Surface Comparator Number 372 or equal

D. CONSTRUCTION FURNISHED INFORMATION:

1) The following information will be part of the information required for the inspection reports:

- a) Compressor: Size, Manufacturer, Moisture and Water separators, Air Drier, Cleanliness of Air, Number of Blast Nozzles.
- b) Safety Equipment: Protective Cloths, Respirators, and Breathing Equipment.
- c) Paint Equipment: Paint Pump, Spray Gun, and other essential items deemed necessary.
- d) Materials: Abrasive: (Size, Type, Source, Cleanliness Paints: Type, Manufacturer, Batch No., other information deemed necessary.
- e) Thinners: Type, Manufacturer, Batch No., and other information deemed necessary.
- f) Inhibitors: Type, Manufacturer, Batch No., and other information deemed necessary.
- g) Grouts: Type, Manufacturer, and other information deemed necessary.
- h) Contractor Personnel: Name, Address, and Phone Number of Supervisor. Name, Address, and Phone Number of Foreman. Name of each Crewmember or Laborer.
- i) Caulking: Type, Manufacturer, and other information deemed necessary.

E. CONTRACTOR REQUIREMENT FOR INSPECTION:

- The CONTRACTOR will notify the INSPECTOR (7) days in advance that portions of the work are ready for inspection and will assist the INSPECTOR in making all necessary tests and inspections.
- 2) No rigging and/or staging shall be removed before required inspection and approval is made. The CONTRACTOR shall assist the INSPECTOR in the use and operation of all equipment for access to the surfaces to be tested.
- 3) The CONTRACTOR will make all necessary rigging available to the INSPECTOR, and assist in the operation of rigging during any and all testing operations.
- 4) Approval by the INSPECTOR of an area does not release the CONTRACTOR from providing the quality and workmanship provided by this Specification.

F. COATING THICKNESS AND CONTINUITY:

1) The specified coverage rates of the coatings are minimums. The first coat on metal surfaces refers to the first paint coat and not to conditioning or other pretreatment applications. Coating shall be applied to the thickness specified, and in accordance with these specifications. The minimum dry film thickness at any spot measurement shall not be less than 80% of the specified thickness. Unless otherwise specified, not less than two (2) coats shall be applied. The CONTRACTOR shall furnish a wet film thickness gauge, a dry film thickness gauge, and certified thickness calibration

standards for the INSPECTOR use. Dry film thickness gauges shall be Mikrotest III, Elcometer Inspector III, Positest, or Positector.

- 2) After each coat has been allowed to dry, the dry film thickness will be measured by the INSPECTOR. The CONTRACTOR shall not apply a successive coat until the dry film thickness of the preceding coat or coats has been approved by the INSPECTOR.
- 3) Coating system thickness is the total thickness of all the required coats of paint, and does not include passivators or sealers.
- 4) Measurement of dry paint thickness over steel surfaces will be done in accordance with SSPC-PA 2.

G. HOLIDAY TESTNG:

- All interior tank immersion surfaces affected by this project (this may include the area above the high water line), shall be holiday tested for discontinuities such as pinholes, missed and skipped areas, using a low voltage holiday tester. The CONTRACTOR shall furnish to the INSPECTOR a Tinker and Rasor Model M-1 Holiday Detector or equivalent for the testing. Testing shall be done in accordance with NACE RP0188, Discontinuity (Holiday) Testing of Protective Coatings.
- 2) Holiday tests shall not be performed until the finish coat has cured sufficiently that it can be walked on without damage, and water will not have a detrimental effect on the coating (after approximately 2-3 days). Holidays shall be repaired by an additional brush application of finish coat, and then retested.
- 3) The CONTRACTOR shall provide the INSPECTOR all rigging and support personnel needed in performing the holiday test.

8.05 PRODUCT HANDLING:

A. STORAGE:

- All coating materials shall be protected from direct sunlight and stored in a separate structure provided by the CONTRACTOR. The structure shall be constructed of non-combustible materials. It shall have sufficient ventilation to prevent the concentration of fumes and vapors.
- 2) Coating storage environmental conditions shall conform to the coating manufacturer's recommendations. The CONTRACTOR shall be solely responsible for the protection of all the material stored by him at the job site.
- 3) Coating materials shall be delivered to the job site in the original and unopened containers, with legible labels, marked with the proper designation of the product, as well as the manufacturer.
- 4) All coating materials at the job site shall be subject to inspection.

- 5) An approved environmental paint spill kit and container shall be located near the paint storage area.
- 6) All coating components will be delivered in unopened containers. They will be protected from freezing and over heating during shipment.
- 7) All coating components must be stored at temperatures above freezing and out of the weather .The containers must remain unopened until they are ready to be used.
- 8) MIXING:
 - a) Mechanical mixers or shakers shall be used to mix the coating after properly measuring the required components. Catalysts, thinners, and other components shall only be added in exact quantities and at the times specified by the coating manufacturer. Containers used for mixing shall be clean and dry. Mixed materials that are not used prior to expiration of the pot life shall be discarded.
 - b) All coatings materials shall be mixed and thinned in the presence of the INSPECTOR. Plural component materials will not be approved for application unless the INSPECTOR can verify the proper proportions were mixed, and they had proper Induction time after mixing.
 - c) An approved environmental paint spill kit and container shall be located near the paint mixing area.
 - d) An appropriate type of fire extinguisher shall be kept nearby.

8.06 SUBMITTALS:

- A. The following information shall be provided in accordance with these specifications. Information on each coating system shall be delivered to the ENGINEER two (2) weeks before applying that coating system. A list of materials proposed to be used under this section shall be provided within ten (10) days of the Notice to Proceed.
- B. For each primer, intermediate, and finish coating the CONTRACTOR shall provide the Manufacturer's Application Instructions and the data listed below:
 - 1) Surface preparation recommendations.
 - 2) Primer, intermediate, and finish coating, pot life and specific mixing instructions.
 - 3) Induction time after mixing.
 - 4) Minimum and maximum dry and wet film thickness per coat.
 - 5) Minimum and maximum curing time between coats including atmospheric conditions for each.
 - 6) Curing time before submergence in liquid.
 - 7) Thinner and thinning ratios to be used with each paint.
 - 8) Ventilation requirements.
 - 9) Allowable atmospheric conditions during which the paint may be applied, including ambient temperature, relative humidity and surface temperature.
 - 10) Allowable applications methods.

- 11) Maximum allowable moisture content of surface to be painted.
- 12) Maximum storage life.
- 13) Manufacturer's certification that painting materials are in accordance with the appropriate reference standards.
- 14) Certificates of approval from the Florida Department of Environmental Protection (FDEP), that the proposed interior coatings are approved for use with potable water.
- 15) Material Safety Data Sheets and cautions concerning health hazards.

8.07 COLOR SELECTION:

- A. All colors are as specified by the CITY's color schedule after submittal of the manufacturers color charts.
- B. The CONTRACTOR shall submit a color chart, from the specified coating manufacturer, to the CITY to select a color for the exterior tank and logo. The CITY shall submit their choice to the CONTRACTOR in writing before application of coatings.

8.08 DAMAGE CLAIMS:

The CONTRACTOR shall be responsible for all damages that may be caused by this painting operation to surrounding property.

8.09 MATERIALS:

- A. The products referenced in this section are presented as a standard of comparison. Products manufactured by other manufacturers may be substituted upon request. Requests for substitution must be in accordance with Section 8.03 Reference Standards above. Only products of one manufacturer shall be used in a particular coating system.
- B. Materials, supplies and articles provided shall be the standard products of manufacturers. Paints in a particular coating system shall be the products of a single manufacturer unless otherwise specified.
- C. No lead containing coatings shall be used.

8.10 COATING MATERIALS:

- A. Each of the following manufacturers is capable of supplying the industrial coating materials specified in this specification. Where manufacturers and paint numbers are listed, it is to show the type and quality of coatings that are required. Proposed substitute materials for the paint numbers shown must be proven to satisfy the material descriptions and to equal or exceed the properties of the listed materials.
 - 1) Tnemec Company, Inc.
 - 2) Induron Protective Coatings, Inc.
 - 3) Sherwin Williams Co.

- B. Standard products of manufacturers other than those specified will be accepted when it is demonstrated to the Engineer that they are equal in composition, durability, usefulness and convenience for the purpose intended. The written acceptance by the CITY shall be obtained before any such alternate products are ordered by the CONTRACTOR. Request for substitution will be considered provided the following minimum conditions are met:
 - 1) The proposed coating system shall use an equal or greater number of separate coats to achieve the required dry film thickness.
 - 2) The proposed coating system shall use coatings of the same generic type.
 - 3) Request for substitution shall have the directions for application and description literature, which includes generic type, nonvolatile content by volume, and information confirming that the substitution is equal to the specified coating system.
 - 4) The contractor shall provide certified laboratory data sheets showing the results of complete spectrographic and durability tests performed on the proposed substitute. A laboratory which conforms to the provisions of ASTM E329 and which is a member of the American council of Independent Laboratories shall perform tests. Costs incurred in the testing program shall be borne by the contractor.
 - 5) No extra contract time for tank out of service will be granted for evaluation of substitute materials.

8.11 INTERIOR COATINGS DESCRIPTION:

- A. Bluestein Park
 - 1) Interior (Wet and Dry) Service (as needed):
 - a) Coating: Two (2) touch-up coats of high build, high solids epoxy lining system, NSF 61 approved.
 - b) Caulking: Sika-flex 1a, a one component polyurethane sealant. (NSF 61 Approved.)

8.12 EXTERIOR COATINGS DESCRIPTION:

- A. Bluestein Park Tank:
 - One (1) full coat of aromatic urethane, zinc-rich primer, one (1) full coat of aliphatic acrylic polyurethane intermediate coat, and (1) one full coat of advanced thermoset fluoropolymer polyurethane.

8.13 ABRASIVE BLAST MATERIALS:

All abrasive blast material shall be "Black Beauty" or approved equal.

8.14 GENERAL:

- A. All work shall be accomplished by skilled workmen in a professional manner.
- B. All surface preparation, repairs, and coating or lining application shall be done by experienced personnel. The awarded contractor shall be able to provide proof of five successful projects as prime contractor on projects of similar size, completed in

the last five years. Similar projects shall be a minimum of 250,000-gallon tank size and shall include full containment.

- C. All work shall comply with Local, County, State, and Federal regulations concerning pollution control.
- D. The close proximity of private and public property will require containment of blast abrasives, paint over-spray, and spatter.

8.15 **SAFETY**:

- A. The CONTRACTOR shall provide site visits by the company's safety officer at regular intervals to ensure compliance with all safety standards by the workers including rigging construction, fall prevention and protection, and personal protective equipment. The safety officer shall visit the site within the first two days of starting work involving rigging.
- B. All rigging shall meet OSHA requirements, and shall be operated in a safe manner, and will conform to industry standards. All rods and other tank appurtenances that are used for rigging purposes shall be carefully checked for structural integrity before use in climbing or rigging. Deficiencies shall be reported and corrected before use.
- C. NOTE: The Contractor is responsible for the integrity of any rigging connections. All rods and rigging points shall be carefully checked for structural integrity before use in climbing or rigging of the tank. Items found to need repair shall be disassembled, cleaned and repaired.

8.16 PROTECTION OF AREAS NOT TO BE COATED:

- A. All areas that are not specified to be coated or repaired shall be adequately protected to avoid any damage or overspray during all repairs, washing, blasting, and painting operations. The CONTRACTOR shall confer with the CITY before conducting any work, to clarify these areas.
- B. The areas NOT to be coated include:
 - 1) All lighting, and all cabling.
 - 2) All antennae and connected wiring.
 - 3) Cathodic protection system wiring.
- C. Tank surfaces under items that are not to be coated shall be coated. Items not to be coated shall be temporarily relocated while the area is coated. After coating has cured, the relocated equipment shall be returned to its original location. Cell phone antenna equipment shall be relocated by the cell phone company's designated contractor ONLY.
- D. The aircraft obstruction light on top of the tank shall be in continuous operation during this project and shall not be obstructed or damaged.
- E. Any damage shall be repaired at the CONTRACTOR's expense.

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8.17 **VENTILATION**:

The CONTRACTOR shall provide forced air ventilation while work is being done inside the tank, after each coat is applied and continue after completion of painting for a minimum period of seven days to insure proper cure of the coating. Air shall be exhausted from the lowest portions of the tank with the top openings kept open and clear. Ventilation requirements will be in strict accordance with the manufacturer's recommendations, this Specification and all OSHA requirements as applicable.

8.18 SURFACE PREPARATION:

- A. The CONTRACTOR shall test all coating to be removed to assure that the coating will meet environmental requirements for removal and disposal.
- B. Surfaces to be coated shall be cleaned in accordance with SSPC-SP1 (Solvent Cleaning). Before applying coating or surface treatments, oil, grease, dirt, rust, loose mill scale, old weathering coatings, and other foreign substances shall be removed, except as specified. Oil and grease shall be removed before mechanical cleaning is started.
- C. Clean cloths and clean fluids shall be used in solvent cleaning. Cleaning and painting shall be scheduled so that dust and spray from the cleaning process will not fall on wet, newly painted surfaces.

D. ABRASIVE BLASTING

- Where mechanical cleaning is accomplished by blast cleaning, the abrasive used shall be washed, graded and free of contaminants, which might interfere with the adhesion and performance of the coatings. Blast abrasive shall be "Black Beauty" or approved equal, capable of achieving a surface profile of 1 to 3 mils (unless otherwise recommended by the paint manufacturer). The CONTRACTOR shall furnish for the INSPECTOR's use, a Keane-Tator Surface Comparator Number 372 or equal.
- Preparation of metallic surfaces shall be based upon comparison with SSPC-VIS 1 (ASTM D2200), and as described herein. The CONTRACTOR shall furnish the photographic standards. To facilitate inspection, the CONTRACTOR shall, on the first day of abrasive blasting operations, abrasive blast metal panels to the standards specified. Plates shall measure a minimum of 8.5 inches by 11 inches. Panels meeting the requirements of the Specifications shall be initialed by the CONTRACTOR and CITYS Representative and coated with a clear non-yellowing finish. One of these panels shall be prepared for each type of abrasive blasting and shall be used as a comparison standard throughout the project.
- 3) Compressed air for blast cleaning shall be clean, dry, and oil free as confirmed by a blotter test each day prior to beginning blasting. Test air quality by directing the air stream from the blast nozzle without abrasive onto a clean piece of blotter paper for 1 minute. Inspect the blotter for contamination.

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- 4) All abrasive and dust from the blasting operation shall be removed from the surfaces before the painting application has begun.
- 5) Abrasive blasted surfaces shall be coated the same day that blasting was done, and before any rust bloom occurs.
- Worn nozzles, tips, etc., shall be replaced regularly. Effective oil and water separators shall be used and serviced on all air lines.

E. ULTRA HIGH PRESSURE WATER

All surface preparation using Ultra High Pressure (UHP) Water shall comply with SSPC-SP12 – WJ-1.

F. BLUESTEIN TANK

- INTERIOR WET
 - a) Only areas damaged by mechanical repairs shall be prepared and painted.
 - b) Mold, mildew, chalk, loose paint, organic deposits, or other surface contamination shall be removed by High Pressure Water Wash (min. 4000 psi) of the entire interior wet area prior to abrasive blast cleaning.
 - Existing interior coatings that were damaged by work performed during this project shall be power tool cleaned to SSPC-SP11 (Bare Metal).
 - d) Solvent wipe all areas to be coated in accordance with SSPC-SP1 prior to application of the specified primer.

2) INTERIOR - DRY

- a) Oil, grease, mold, mildew, chalk, and other surface contamination shall be removed by High Pressure Water Wash (min. 2500 psi).
- b) All rusted and abraded areas shall be abrasive blasted to SSPC-SP6 (Commercial Blast).

3) EXTERIOR

- a) Oil, grease, mold, mildew, chalk, loose paint, or other surface contamination shall be removed by High Pressure Water Wash (min. 4000 psi) prior to abrasive blast cleaning.
- b) Abrasive blasts clean the entire exterior to SSPC-SP6 (Commercial Blast) to remove all coatings.

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> c) The CONTRACTOR shall take every precaution necessary to contain dust from the abrasive blasting operation blowing towards the surrounding buildings and passing traffic.

8.19 **GENERAL APPLICATION PROCEDURES:**

- All painting equipment shall be maintained in good working order and shall be comparable to that described in the coating manufacturer's most recent application instructions. It shall be thoroughly cleaned and inspected daily.
- B. Unless otherwise specified, the application of paint shall be in accordance with SSPC-PA-1 latest edition and the paint manufacturer's printed instructions for surface preparation, mixing, thinning, and paint application unless otherwise specified herein. The CONTRACTOR shall fully comply with all recommendations and instructions set forth by the paint manufacturer. All coatings shall be applied before the shelf life of the coating expires.
- C. Paint shall only be applied over thoroughly dry surfaces, with a surface temperature that conforms to the manufactures minimum - maximum limits, and the relative humidity shall not exceed 85%. The surface temperature must be at least 5 degrees above the dew point. Paint shall not be applied to a condensing surface. Paint shall not be applied when freshly painted surfaces may be damaged by rain, fog, dust or condensation and/or when it can be anticipated that these conditions will prevail during the drying period.
- D. Except where otherwise specified, thinning shall only be done when necessary for the workability of the coating material and then only in accordance with the coating manufacturer's most recent printed application instructions. Use only approved manufacturer's thinner. Thinner shall only be added in the exact quantities as recommended by the manufacturer.
- E. Paint shall be applied in a uniform layer, with a 50% over-lap pattern. All runs and sags shall be brushed out immediately or the paint will be removed and surface recoated.
- F. All fasteners, welded seams, edges, holes, etc. shall have special care taken in applying the prime and topcoat. These areas shall be brush coated before applying the coating to remaining surfaces. This is to insure proper dry film thickness on these areas.
- G. Areas inaccessible to spray shall be brushed. If inaccessible by brush, daubs or sheepskins may be used if approved by the manufacturer. Top quality, properly styled brushes and rollers shall be used. The brushing or rolling shall be done so that a smooth coat as nearly uniform in thickness as possible is obtained. Brush or roller strokes shall be made to smooth the film without leaving deep or detrimental marks.
- H. Drying time between coats will adhere to the coating manufacturer's recommendation with conditions of temperature and humidity taken into account.

All paint and coating materials shall be stored prior to application under cover and at temperature within 10 degrees F. of the anticipated application temperature.

- I. The dry film thickness of each coat and the entire system shall follow the coating manufacturer's recommendations and this specification. The number of coats specified shall be a minimum to achieve the specified film thickness.
- J. All paint damaged areas, which shall be touch-up painted, shall be feathered after surface preparation to provide a smooth, even surface before priming. Touch-up systems will be the same as the original specification. Manufacturer's complete touch-up recommendations shall be followed.

8.20 COATING SYSTEMS:

- A. All interior coatings, caulking materials, and linings of potable water tank shall be approved for application in accordance with NSF-61 for use in potable water systems.
- B. All interior surfaces shall be cleaned as applicable in Section 3.05.
- C. Each coat shall be of a contrasting color to facilitate application and inspection.
- D. The CONTRACTOR shall submit coating manufacturer's color charts to the ENGINEER within ten (10) days after Contract Award. Finish colors will be selected by the CITY.
- E. A five-gallon kit of all finish coats of paint shall be supplied to the CITY as touch-up paint. This kit shall be "fresh" at the time of final acceptance of the tank. The touch-up kit shall have a minimum shelf life of one (1) year.
- F. The CONTRACTOR shall be responsible for all damages that may be caused by this painting operation to surrounding property and to vehicles traveling on and parked on adjacent properties and roadways.
- G. The CONTRACTOR shall take every precaution necessary to avoid paint splatter blowing toward the street or any surrounding structures, including parking areas and buildings. This also includes vehicles driving near the tank.

H. BLUESTEN TANK

- 1) Interior (Wet) Coating System:
 - a) PRIME COAT: Apply by brush to all bare metal interior surfaces, Tnemec Company Series N140 PotaPox Plus at a dry film thickness of 3 mils to 5 mils.
 - b) TOP COAT: Apply by brush to all previously primed interior surfaces, Tnemec Company Series N140 PotaPox Plus at a dry film thickness of 3 mils to 5 mils.

- c) COVERAGE RATES: Maximum coverage rates shall not exceed manufacturer's recommendations per coat. The total dry film thickness of the interior system shall be no less than 9.0 mils.
- d) CAULKING: After the finish coat has cured per the manufacturer's recommendations, all of the roof lap joints, angles, and brackets that cannot be removed and other areas as indicated by the inspector shall be caulked using a one component polyurethane sealant as manufactured by Sika Corporation, Sika-flex 1a. The sealant shall be applied per the manufacturer's data sheets.

2) Interior (Dry) Coating System:

- a) PRIME COAT: Apply by brush, roller, or spray, to all bare metal interior dry surfaces Tnemec Company's Series 135 Chembuild at a dry film thickness of 3.0 mils to 5.0 mils.
- b) INTERMEDIATE COAT: Apply by brush, roller, or spray, to all previously primed interior dry surfaces Tnemec Company's Series 135 Chembuild at a dry film thickness of 3.0 mils to 5.0 mils.

3) Exterior Coating System:

- a) PRIME COAT: Apply by brush, roller, or spray, to all bare metal exterior surfaces Tnemec Company's Series 90-97 Tneme-Zinc at a dry film thickness of 2.5 mils to 3.5 mils.
- b) INTERMEDIATE COAT: Apply by brush, roller, or spray, to all exterior surfaces Tnemec Company's Series 73 Endura-Shield at a dry film thickness of 2.0 mils to 3.0 mils.
- c) TOP COAT: Apply by brush, roller, or spray, to all exterior surfaces, one coat of Tnemec Company's Series 700 Hydroflon, at a dry film thickness of 2.0 mils to 3.0 mils.
- d) LETTERING/LOGO: Apply using one coat of the specified top coat in addition to the specified coating system.
- e) COVERAGE RATES: Maximum coverage rates shall not exceed manufacturer's recommendations per coat. The total dry film thickness of the exterior system shall be no less than 7.0 mils.

END OF SECTION EIGHT

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SECTION 9: REPAIRS & RENOVATIONS:

9.01 DESCRIPTION:

All repairs and renovations to be performed are as listed herein.

9.02 RELATED SECTIONS:

Section 4 - Scope of Work

Section 6 - Warranties and Bonds

Section 8 - Painting

9.03 REFERENCED STANDARDS CODES:

A. AWWA D100 Welded Steel Tanks For Water Storage

B. AWS D1.1 American Welding SocietyC. SSPC Steel Structure Painting Council

D. NACE National Association of Corrosion Engineers

E. NSF Standard 61 Drinking Water System Components-Health EffectsF. MSS SP-69 Manufacturers Standard Society Standard Practice

9.04 SUBMITTALS:

- A. Structural: Submit detailed fabrication and erection drawings. Indicate all dimensions, method of assembly, connections and bill of materials.
- B. Should more than one submittal be required, later submittals should clearly identify all changes.
- C. Indicate all shop and erection dimensions and details, including cuts, copes, connections, holes, threaded fasteners and welds.
- D. Indicate all shop and field welds by AWS A2.0 "Welding Symbols".
- E. Revise original approved shop and erection drawings to correspond with changes made in the field.
- F. Submit Product data, (manufacturer's literature), Specifications and installation instructions for manufactured items.
- G. Upon completion of all work, "as built" drawings shall be submitted. These drawings shall be marked up to show all changes or modifications made that deviate from the approved submittal drawings. Final payment will not be processed until the "as built" drawings are submitted.

9.05 TANK REPAIR REQUIREMENTS – BLUESTEN PARK TANK:

A. <u>Inlet Pipe</u>: Replace Inlet Pipe section that penetrates the concrete at the base of the dry riser in <u>accordance with drawing 10-0781-R5</u>. Cut-off existing pipe flush with top of concrete inside the riser. Cut pipe below ground within one foot of concrete foundation. Fill abandoned pipe with concrete. Install a new section of pipe from existing pipe inside riser, through the riser wall, and routed below ground to connect with existing horizontal pipe. Install a thrust block at the base of the

vertical pipe section inside the riser. All piping shall be AWWA Standard ductile iron pipe. Connect new pipe to existing pipe using mechanical joints.

- B. <u>Column Ladder</u>: Install a new carbon steel ladder in place of the existing column ladder. <u>See drawing 10-0781-R3</u> for general details. The ladder shall begin no less than 10 feet above the ground, and extend up no less than 3 feet above the balcony floor. The ladder shall be no less than 7 inches from the column at any point and attached to column leg using 3/8"-thick carbon steel stand-offs, on both sides of the ladder, welded to the ladder and the column, and spaced no more than 10 feet apart. The ladder rails and rungs shall meet current OSHA requirements for dimensions and weld details for steel, fixed ladders.
- C. <u>Shell/Roof Ladder</u>: Remove existing shell/roof ladder, including all stand-offs, rolling attachments, and roof vent attachment brackets. Install a new carbon steel ladder in place of the existing shell/roof ladder. <u>See drawing 10-0781-R3</u> for general details. The ladder shall begin no more than 1 foot above the balcony floor, and extend up to the roof vent. The new ladder shall be curved to match the tank. The ladder shall be no less than 7 inches from the tank at any point and attached to tank using 3/8"-thick carbon steel stand-offs, on both sides of the ladder, welded to the ladder and the tank, and spaced no more than 10 feet apart. The ladder rails and rungs shall meet current OSHA requirements for dimensions and weld details for steel, fixed ladders.
- D. <u>Climbing Safety Devices</u>: Install new, cable-type climbing safety devices on the Column Ladder and the Shell/Roof Ladder. All parts used on this installation shall be manufactured and approved for use as part of a fall prevention device. The cable shall be stainless steel. Completely install device as instructed by the manufacturer.
- E. <u>Ladder Gate</u>: Install a new, aluminum, hinged, locking ladder gate at the base of the column ladder. Completely install ladder gate as instructed by the manufacturer. Install a lock supplied by the CITY.
- F. Roof Vent: Install a new 24" diameter tank mounting flange and new mushroomstyle vent assembly. The new vent/screen assembly shall have a capacity to pass air so that at the maximum possible rate of water, either entering or leaving the tank, excessive pressure will not be developed. The vent screen shall be designed and so constructed as to prevent the entrance of birds, insects or animals and ensure fail-safe operation in the event that the insect screens frost over or become blocked. Vent design shall be in accordance with AWWA D100. The neck and mounting flange shall be welded carbon steel with a bolted flange to attach the vent. The vent body and hood shall be constructed of aluminum and shall be bolted to the mounting flange. The screen shall be non-corrosive material.
- G. Overflow: Extend the existing overflow pipe to grade by installing welded steel pipe and fittings to the existing pipe stub. See drawing 10-0781-R7 for general details. New pipe shall be routed through the balcony floor and attached to one column leg, terminating approximately 24 inches above grade. Install a Tideflex TF-2 flap valve at the discharge end of the pipe. Install a 24" x 60" x 4" thick concrete splash pad under the pipe discharge. See drawing 10-0781-R4 for more detail.

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H. Roof Hatch: Install a new 24" diameter roof hatch in place of the existing roof hatch. See drawing 10-0781-R4 for general details. The new hatch shall be similar in material, design, and fabrication to the existing hatch. Install the hatch so that the lid swivels towards the roof center when opening.

- I. <u>Sway Rods</u>: Replace five severely corroded sway rods on the upper panel. New sway rods shall be fabricated from A36 carbon steel and match the existing sway rods in size, material, and design. All rod splice joints shall be full-penetration welds. CONTRACTOR shall provide a material certification, welder certification, WPS, and PQR for all sway rods prior to installation.
- J. <u>Riser Stay Rods</u>: Replace all riser stay rods (including belly rods). New rods shall be fabricated from A36 carbon steel and match the existing rods in size, material, and design. All rod splice joints shall be full-penetration welds. CONTRACTOR shall provide a material certification, welder certification, WPS, and PQR for all rods prior to installation.
- K. <u>Column Anchor Bolt and Chair</u>: One anchor chair at the base of the ladder column is severely corroded. <u>See drawing 10-0781-R6</u> for general details. The following repair shall be completed:
 - 1) Remove existing nut from anchor stud.
 - Remove existing anchor chair from column. Care should be taken to not damage column wall when cutting off chair. DO NOT CUT-OFF ANCHOR STUD.
 - 3) Cut out corroded section of column wall. Opening in column shall have vertical sides, horizontal top, and a minimum 2-inch radius corners. Grind and bevel edges of opening for full penetration weld.
 - 4) Install a fabricated carbon steel plate to fill opening in column. The new plate section shall be rolled to match the radius of the column. Preliminary measurements indicate the column wall is ½" thick. Field verifies thickness and match new insert plate to existing thickness. Bevel edges of insert plate for full penetration weld.
 - Insert plate weld shall be full penetration on top and sides. Grind existing column-to-baseplate weld back 3 inches on either side of opening. Weld column-to-baseplate weld in one continuous ½" fillet weld across ground out sections and new insert plate. Multiple passes are acceptable to achieve proper fillet size.
 - 6) Install a ¼" wall, carbon steel sleeve over the corroded portion of the anchor stud. The top and bottom of the sleeve shall be positioned over sound metal, and not interfere with the anchor chair. Weld the sleeve to the stud, top and bottom.

- 7) Fabricate a new anchor chair using the same material and design as the existing chair. CONTRACTOR shall provide a material certification, welder certification, WPS, and PQR for all sway rods prior to installation.
- L. <u>Cell Antenna Cable Mounts</u>: Install welded brackets on the columns to mount cell antenna cables. New brackets shall be welded to the tank column and hold the cables away from the column. Contact the antenna company for a standard design.
- M. <u>Earplate Repair:</u> Install lap welded patch plate over severe corrosion on earplate. Note Photo #23 in Inspection Report. <u>See drawing 10-0781-R9</u> for details. Thoroughly abrasive blast area to remove all rust scale before beginning repair.

9.06 QUALITY ASSURANCE:

- A. Design Criteria: **AWWA D100 and C200 Series** (current edition) (individual standards as applicable).
- B. Qualifications of Suppliers and Personnel:
 - 1) Steel Fabricator: Not less than 5 years continuous experience in the fabrication of structural steel.
 - 2) Steel Erector: Not less than 5 years continuous experience in the erection of tanks or similar structures.
 - 3) Pipe Fabricator: Not less than 5 years continuous experience in the fabrication of piping systems.
 - 4) Pipe Fitter/Installer: Not less than 5 years continuous experience in the installation of large bore piping for potable water use.
 - 5) Welding: All welding shall be performed by welders who are currently qualified by tests as prescribed in AWS D1.1 "Qualification Procedure".
 - 6) Use experienced riggers to erect steel. Carefully plan and lay out work so that a minimum of cutting and removal of undamaged material will be necessary.

9.07 WARRANTY:

All material and workmanship covered under this section shall be guaranteed as **outlined** in Section 6.

9.08 EXTRA WORK:

Any work items that are found after the work has begun shall be brought to the attention of the Engineer. These out of scope items shall be processed by Directive only.

9.09 MATERIALS:

- A. All materials shall be new and shall be in conformance with AWWA Standards.
- B. Pipe and Fittings:

- 1) Pipe and fittings shall be manufactured to the nominal dimension cited in the applicable ASTM standard, and shall be made by one manufacturer. Fabricated fittings shall not be permitted.
- 2) All pipe and fittings shall conform to National Sanitation Foundation (NSF) Standard 61 or the health effects portion of NSF Standard 14.
- C. Structural steel shapes, plates and bars: ASTM A36.
- D. Machine bolts: Use ASTM A307 machine bolts at all connections not indicated on drawings as high strength or stainless steel.

E. Welding electrodes:

1. Mild steel-covered arc welding electrodes for A36 steels: AWS A5.1, E70XX Series, low hydrogen, having a minimum yield point of 60,000 psi.

9.10 **ISOLATION VALVES – 12"**:

- A. Valves shall be Clow AWWA valves as manufactured by Clow Valve Company, Oskaloosa, Iowa.
- B. Valves shall conform to the latest revision of AWWA standard C-509 covering resilient seated gate valves and be approved by ULFM.
- C. Valves shall be non-rising stem, opening by turning stem right and provided with a handwheel with the word 'open' and an arrow cast in the metal to indicate direction to open.
- D. The wedge shall be of cast iron completely encapsulated with rubber.
- E. The sealing rubber shall be permanently bonded to the cast iron wedge to meet ASTM tests for rubber metal bond ASTM D429.
- F. Valves shall be supplied with o-ring seals at all joints. No flat gaskets allowed.
- G. Stems for NRS assemblies shall be cast bronze with integral collars in full compliance with AWWA. The NRS stem stuffing box shall be the o-ring seal type with two o-rings located above thrust collar and one o-ring below. The two o-rings above the thrust collar shall be replaceable with valve fully open and subjected to full rated working pressure.
- H. There shall be two low torque thrust bearings located above and below the thrust collar. The stem nut shall be independent of the wedge and shall be made of solid bronze. There shall be a smooth, unobstructed waterway free of all pockets, cavities and depressions in the seat area.
- I. The body and bonnet shall be coated with fusion bonded epoxy both interior and exterior, complying with AWWA C-550 and be NSF 61 approved.
- J. Each valve shall have maker's name, pressure rating and year in which manufactured cast on the body.

9.11 MATERIAL HANDLING:

A. Storage of Materials

- 1) Store steel to be incorporated into this project above ground on platforms, skids or other approved supports.
- 2) Protect steel from corrosion.
- 3) Store welding electrodes in accordance with AWS D12.1.

9.12 FABRICATION:

All fabrication shall be done by manufacturers who are regularly engaged in the manufacture of the type of work herein specified.

9.13 SCHEDULE:

All repair and renovation work shall be accomplished prior to start of any painting operations.

9.14 ERECTION:

All work shall be accomplished by skilled workmen in a workmanlike manner. All welders shall hold current AWS certification and shall submit all credentials to the Engineer prior to starting work. All welding will be subject to testing in accordance with Section 11 of AWWA D100.

CAUTION: It is understood that the contractor may use existing structural members for access and rigging purposes. All rods and existing members shall be carefully checked for structural integrity before use in climbing or rigging of the tank. Rods found to need repair shall be disassembled, cleaned and repaired as directed by the ENGINEER.

END OF SECTION NINE

PROJECT [A] 250,000 GALLON BLUESTEN PARK TANK END OF TECHNICAL SPECIFICATIONS

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SECTION 10: PROJECT [B] 500,000 GALLON BEACH TANK DESCRIPTION:

10.01 The Beach Tank is a 500,000-gallon, pedestal sphere, welded, steel tank. No nameplate was found on the tank. City personnel provided basic height dimensions for the tank. The following information was observed:

Manufacturer: appears to be Chicago Bridge & Iron

Capacity: 500,000 Gallons

Year Built: 1967

Height to L.W.L: approx. 100'-0" Height to H.W.L: approx. 135'-0"

10.02 The overall project consists of providing all labor, materials, supervision, power, equipment and supplies for mechanical repairs and repainting of the elevated tanks included in this specification.

10.03 INSPECTION REPORT:

Beach tanks were inspected in October 2010 by Tank Engineering And Management Consultants, Inc. Bidders should familiarize themselves with the report and the condition of the structures at the time of the inspection. The inspection was performed to determine the condition of the structures and to determine the condition of the coatings. The reports describe conditions existing at the time of the inspection. The REPORTS HAVE BEEN INCLUDED SO THAT FIRMS ARE AWARE OF THE EXTENSIVE REPAIR THAT NEEDS TO BE PERFORMED.

10.04 SUBMITTALS:

A <u>Pre-Job Submittals</u>

- Before mobilizing to the jobsite, the CONTRACTOR shall submit to the ENGINEER for the ENGINEER'S approval, a schedule of values allocated to various portions of the Work, prepared in such form and supported by such data to substantiate its accuracy as the ENGINEER may require. This schedule, unless objected to by the ENGINEER, shall be used as a basis for reviewing the CONTRACTOR'S application for Payment. However, the CONTRACTOR shall provide a realistic schedule of values and CONTRACTOR shall be prohibited from assigning a disproportionately high allocation to early phases of the work (also commonly called "front-end loading"). It shall be a material breach of this Agreement if Contractor front-end loads the Agreement. Mobilization and demobilization will NOT be paid as a separate line item. The CITY will not pay for materials on site until they are applied or installed on the tank.
- 2) Prior to the commencement of any work here under the CONTRACTOR shall submit the following plans, or proof that such plans are in effect.
- 3) <u>Hazardous Communication Plan</u>: CONTRACTOR agrees to communicate to his employees all information regarding chemicals, substances and other hazards to which CONTRACTOR'S employees foreseeable could be exposed while performing work on the premises, and to properly inform, educate and train all employees performing work hereunder as to all applicable Safety and Health laws and Regulations including, but not limited to, the Hazard Communication Standard, 29

- CFR, Part 1910.1200 issued by Occupational Safety and Health Administration, U.S. Department of Labor.
- 4) <u>Lock-Out/Tag-Out Plan</u>: CONTRACTOR shall provide a plan, locks and tags for locking out and tagging of equipment as may be necessary.
- 5) Health & Safety Policy: CONTRACTOR shall submit a copy of the Health & Safety Policy, and take the necessary steps to ensure that subcontractors, if any, comply with all safety policies, all Federal and State job safety and health regulations including, but not limited to, the Hazard Communication Standard, 29 CFR, Part 1910.1200.
- 6) <u>Confined Space Entry</u>: CONTRACTOR shall submit a plan for Confined Space Entry in accordance with 29 CFR 1910.146. CONTRACTOR shall also provide confined space entry attendant(s), and LEL/O₂ monitor as required by the Confined Space Entry plan.

7) <u>Hurricane Preparedness Plan</u>:

- Within thirty (30) days of the date of Notice to Proceed, the CONTRACTOR shall submit to the ENGINEER/CITY a Hurricane Preparedness Plan. The plan should outline the necessary measures that the CONTRACTOR proposes to perform at no additional cost to the CITY in case of a hurricane warning.
- b) In the event of inclement weather, or whenever the ENGINEER/CITY shall direct, the CONTRACTOR will, and will cause the Subcontractors to, protect carefully the work and materials against damage or injury from the weather. If, in the opinion of the ENGINEER/CITY, any portion of work or materials have been damaged or injured by reason of failure on the part of the CONTRACTOR or any Subcontractors to so protect the work, such work and materials shall be removed and replaced at the expense of the CONTRACTOR.
- c) Prior to mobilizing on site, the CONTRACTOR shall submit a plan to the CITY for satisfying damage claims on surrounding property such as buildings, automobiles, landscaping, sidewalks, etc., as a result of paint spatter, abrasive blast materials, mechanical damage, etc.

B. Post-Job Submittals

- 1) Drawings shall be supplied to the ENGINEER/CITY upon submittal of final invoice. CONTRACTOR-supplied as-built drawings shall include four (4) copies, one (1) reproducible for each drawing, and a disk copy using ACAD or other format as approved by the ENGINEER/CITY.
- 2) Reference each section of these specifications for additional submittal requirements.

10.05 SITE CONDITIONS:

A. The CITY will provide a staging area within the confines of each site.

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B. The immediate area surrounding the Beach Tank is extremely congested. Parking for tractor-trailers and large equipment will likely require blocking-off part of the street. The CONTRACTOR shall coordinate with the CITY to ensure all permits and procedures are adhered to for these actions.

- C. Equipment and material required for daily work may be stored at the elevated water storage tanks but cannot unreasonably encumber the job site with material or equipment. Storage will be at the risk of the CONTRACTOR. No responsibility will be assumed by the CITY or the ENGINEER for the security of stored material and equipment. All hazardous material must be stored in locked containers.
- D. Coordination of access to the elevated water storage tanks must be arranged with the CITY prior to accessing the construction area.
- E. At the completion of this project, the areas surrounding the water tanks shall be restored to a condition equal to or better than conditions prior to this project. Any grass, shrubbery, trees, etc., damaged by CONTRACTOR personnel or equipment, or as a result of work performed shall be replaced at the CONTRACTOR's expense. All damaged grass shall be replaced with sod of the same type as the existing grass.
- F. The CONTRACTOR shall be responsible for any damage to any surrounding structures such as buildings, cars, landscaping, sidewalks, etc., as a result of paint spatter, blast abrasive, mechanical damage, etc. All damage shall be repaired to the satisfaction of the property owner making the claim at no additional cost to the CITY or ENGINEER.

10.06 GENERAL PROCEDURES FOR WORK TO BE PERFORMED:

- A. All fabrication, installation, abrasive blasting, and coating or lining application shall be done by experienced personnel. The awarded contractor shall be able to provide proof of five successful projects as prime contractor on projects of similar size, completed in the last five years. Similar projects shall be a minimum of 500,000 gallon tank size and shall include full containment.
- B. The CONTRACTOR shall furnish all labor, materials, equipment, tools, services and incidentals to complete all work required by these specifications and as shown on the drawings.
- C. The CONTRACTOR shall perform the work complete, in place, and ready for continuous service, and shall include, repairs, testing, permits, cleanup, replacements, and restoration required as a result of damages caused during this construction.
- D. All materials, equipment, skills, tools and labor which are reasonably and properly inferable and necessary for the proper completion of the work in a substantial manner and in compliance with the requirements stated or implied by these Specifications or Drawings shall be furnished and installed by the CONTRACTOR without additional compensation, whether specifically indicated in the Contract Documents or not.

E. The CONTRACTOR shall comply with all Municipal, County, State, Federal, and other codes which are applicable to the proposed work and all related activities.

10.07 <u>SUBSTANTIAL COMPLETION:</u>

- A. The work, or any separable parts thereof, identified herein shall be deemed Substantially Completed at such time that all incidental requirements necessary to enable the CITY to continuously and successfully utilize the work or separable part thereof, for the purposes of which it is intended are completed.
- B. The Contract Times of Substantial Completion for the work shall be as indicated

10.08 FINAL COMPLETION:

- A. Project shall be deemed fully completed when the designated Coating Inspector, CITY Inspectors, and the Engineer agree that all work required by this specification has been completed satisfactorily to the intent of these documents.
- B. The parties mentioned above shall make a final inspection walk-through and submit a written acceptance to the contractor before final payment is made.

10.09 WORK SEQUENCE:

- A. Only one tank shall be out of service at any time. The first tank shall be complete and approved by the CITY and the ENGINEER, prior to beginning any work on the second tank, unless prior written approval is obtained from the CITY.
- B. Construct work in stages to accommodate the CITY use of the premises during the construction period; coordinate the construction schedule and operations with the CITY representative.

10.10 CONSTRUCTION AREAS:

- A. CONTRACTOR shall limit his use of the construction areas for work and storage, to allow for:
 - 1) Work by other Contractors
 - 2) CITY use
- B. CONTRACTOR shall assume full responsibility for the protection and safekeeping of all materials and equipment under this contract, stored on site.
- C. Move and store products under CONTRACTOR'S control, which interfere with operations of the CITY or separate CONTRACTORS.
- D. Obtain and pay for the use of additional storage or work areas needed for operations.

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10.11 CITY OCCUPANCY:

A. The CITY will have full access to and use of all existing utilities during the entire period of construction for the conduct of its normal operations. Cooperate with the CITY representative in all construction operations to

minimize conflict, and facilitate CITY usage.

B. CONTRACTOR shall at all times conduct his operations as to insure the least inconvenience to the facility.

10.12 <u>INTENT:</u>

- A. All work called for in the specifications applicable to this Contract, but not shown on the Plans in their present form, or vice versa, shall be of like affect as if shown or mentioned in both. Work not specified in either the plans or in the Specifications, but involved in carrying out their intent or in the complete and proper execution of the work, is required and shall be performed by the CONTRACTOR as though it were specifically delineated or described.
- B. The apparent silence of the specifications as to any detail, or the apparent omission from them of a detailed description concerning any work to be done and materials to be furnished, shall be regarded as meaning that only the best general practice is to prevail and that only material and workmanship of the best quality is to be used, and interpretation of these specifications shall be made upon that basis.
- C. The inclusion of the General Requirements (or work specified elsewhere), in the General part of the specifications is only for the convenience of the CONTRACTOR, and shall not be interpreted as a complete list of related specification sections.

10.13 DISCREPANCY BETWEEN DRAWINGS AND SPECIFICATIONS:

In case of any discrepancy between the drawings and specifications, the more stringent requirement shall apply. The CONTRACTOR will not be held responsible for the discovery of such discrepancy, but any work done on the item involved after such discovery, and prior to authorization by the ENGINEER, will be done at the CONTRACTOR'S risk and expense.

10.14 PRE-CONSTRUCTION CONFERENCE:

- A. A joint meeting shall be held with representatives of the CONTRACTOR and major subcontractors, the ENGINEER, the CITY, and other invited parties or government agencies which may be affected by or have jurisdiction over the Project.
- B. This meeting is intended to introduce the various key personnel from each organization and discuss the Contract Documents, the start of the construction, order of work, labor and legal requirements, insurance requirements, names of major subcontractors, method of payment, shop drawing requirements, protection of existing facilities and other pertinent items associated with the project. The CONTRACTOR shall bring to this conference six (6) copies of a proposed work schedule.

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SECTION 11: SUBMITTAL PROCEDURES:

11.01 DESCRIPTION:

This section specifies the procedures for submittals for the work to be performed in accordance with these specifications. Submittals covered by this section include manufacturers' information, shop drawings, test results, samples, requests for substitutions, and miscellaneous work-related submittals. Submittals shall also include, but not be limited to, all mechanical, electrical and electronic equipment and systems, materials, reinforcing steel, fabricated items, and piping and conduit details. The CONTRACTOR shall furnish all drawings, specifications, descriptive data, certificates, samples, test methods, schedules, and manufacturer's installation and other instructions as specifically required in the contract documents to demonstrate fully that the materials and equipment to be furnished and the methods of work comply with the provisions and intent of the contract documents.

11.02 CONTRACTOR'S RESPONSIBILITIES:

- A. The CONTRACTOR shall be responsible for the accuracy and completeness of the information contained in each submittal and shall assure that the material, equipment, or method of work shall be as described in the submittal. The CONTRACTOR shall verify that all features of all products conform to the specified requirements. Submittal documents shall be clearly edited to indicate only those items, models, or series of equipment, which are being submitted for review. All extraneous materials shall be crossed out or otherwise obliterated. The CONTRACTOR shall ensure that there is no conflict with other submittals and notify the ENGINEER/CITY in each case where his submittal may affect the work of another CONTRACTOR or the CITY. The CONTRACTOR shall coordinate submittals between his SUB-CONTRACTOR'S and suppliers.
- B. The CONTRACTOR shall coordinate submittals with the work so that work will not be delayed. He shall coordinate and schedule different categories of submittals, so that one will not be delayed for lack of coordination with another. No extension of time will be allowed because of failure to properly scheduled submittals. The CONTRACTOR shall not proceed with work related to a submittal until the submittal process is complete. This requires that submittals for review and comment shall be returned to the CONTRACTOR stamped "No Exceptions Taken" or "Make Corrections Noted."
- C. The CONTRACTOR shall certify on each submittal document that he has reviewed the submittal, verified field conditions, and complied with the contract documents.
- D. The CONTRACTOR may authorize in writing a material or equipment supplier to deal directly with the ENGINEER/CITY with regard to a submittal. These dealings shall be limited to contract interpretations to clarify and expedite the work.

11.03 CATEGORIES OF SUBMITTALS:

A. **GENERAL**

1) Submittals fall into two general categories: submittals for review and comment, and submittals that are primarily for information only. Submittals, which are for information only, are generally specified as PRODUCT DATA of the applicable specification sections.

2) At the beginning of work, the CONTRACTOR will furnish the ENGINEER/CITY lists of those submittals specified in the project manual. Two separate lists will be provided: submittals for review and comment and product data (submittals) for information only.

B. SUBMITTALS FOR REVIEW AND COMMENT:

All submittals except where specified to be submitted as product data for information only shall be submitted by the CONTRACTOR to the ENGINEER/CITY for review and comment.

C. SUBMITTALS (PRODUCT DATA) FOR INFORMATION ONLY:

Where specified, the CONTRACTOR shall furnish submittals (product data) to the ENGINEER/CITY for information only.

11.04 SUBMITTAL PROCEDURES:

- A. Within 15 days after award of Contract, the CONTRACTOR shall submit a list of shop drawings by Specification Section, and include a list of dates submittals are expected to be made.
- B. Deliver submittals at established times before the dates approved submittals will be needed. Verify with the ENGINEER/CITY of the required timing and dates.
- C. Submit shop drawings electronically in AutoCAD Release 2000 or a later format, or as an alternate, one reproducible and three prints, as directed by the ENGINEER/CITY.
- D. In addition to the usual, or normal, shop drawings, submit the following for approval when requested.
 - 1) Sequence of operations.
- E. Submit three samples of materials, unless otherwise specified.

11.05 RESUBMISSION REQUIREMENTS:

- A. Shop Drawings:
 - 1) Review drawings and indicate revision date as required, and resubmit as specified for initial submittal.
 - 1) Indicate on drawings any changes that have been made other than those requested by the ENGINEER/CITY.
- E. Product data and samples: Submit new data and samples as required for first submittal.

11.06 CONTRACTOR'S RESPONSIBILITIES:

- A. Review shop drawings, product data, and samples prior to submission to the ENGINEER/CITY.
- B. Verify field measurements, field construction criteria, catalog numbers, and similar data.
- Coordinate each submittal with work of the Project and Contract Documents.

- CONTRACTOR'S responsibility for errors and omissions in submittals or deviations from Contract Documents is not relieved by the ENGINEER/CITY'S review of submittals.
- E. CONTRACTOR'S responsibility for deviations in submittals from requirements of Contract Documents is not relieved by the ENGINEER/CITY'S review of submittals, unless the ENGINEER/CITY gives written acceptance of specific deviations.
- F. Notify the ENGINEER/CITY in writing of deviations from requirements of Contract Documents at time submittals are made.
 - 1) A "deviation" shall be construed to mean a minor change to the sequence indicated by the drawings or specification.
 - 2) A "deviation" is not intended to allow substitutions or product options. In addition to notifying the ENGINEER/CITY in writing of deviations, circle deviations on shop drawings.
- G. Do not begin work that requires submittals until submittals have been returned with the ENGINEER/CITY'S stamp and initials or signature indicating review and approval.

11.07 CITY'S RESPONSIBILITIES:

- A. Review submittals with reasonable promptness on basis of design concept of project and information contained in Contract Documents.
 - 2) Attention is directed to the fact that the ENGINEER/CITY'S review is only to check for general conformance with the design concept of the project and general compliance with Contract Documents. The ENGINEER/CITY assumes no responsibility for correctness of dimensions, details, quantities, or procedures shown on shop drawings or submittals.
 - 2) Omission in shop drawings of any materials indicated in Contract Drawings, mentioned in Specifications, or required for proper execution and completion of work, does not relieve the CONTRACTOR from responsibility for providing such materials as indicated in Contract Documents.
 - 3) Approval of a separate or specified item does not necessarily constitute approval of an assembly in which this item functions.
- B. Affix stamp and initials or signature acknowledging review of submittal as follows:
 - 1) No exceptions taken.
 - 2) Make corrections noted. Do not resubmit
 - 3) Make corrections noted. Resubmit.
 - 4) Rejected. Resubmit in accord with Contract Documents.
- C. Return submittals to CONTRACTOR for distribution.

END OF SECTION ELEVEN

SECTION 12: WARRANTIES AND BONDS:

12.01 GUARANTEE:

- A. All work covered under these specifications shall be guaranteed for a period of one (1) year after completion and acceptance of the work. A first anniversary inspection will be scheduled by the CONTRACTOR, during the twelfth month following acceptance of the work. A report shall be furnished to the CITY describing the condition of the paint system and other work covered under this Contract. Tank draining shall be coordinated with the CITY representative. Any latent defects found during this inspection shall be promptly repaired by the CONTRACTOR. Any location where coats of paint have peeled off, bubbled or cracked, and any location where rusting is evident, shall be considered a failure of the paint system. The CONTRACTOR shall make repairs at all points where failures are observed as per the Technical Specifications, Section 09900 PART-3. The CONTRACTOR shall submit a schedule and plan outlining the repair procedures.
- B. Failure on the part of the CONTRACTOR to schedule this warranty inspection will not relieve him of warranty responsibility. Any defects found by the CITY, after the normal warranty period, will be assumed to have occurred during the time the warranty was in effect.

12.02 COATING & LINING:

The CONTRACTOR shall comply with the above section and also shall provide Manufacturer's standard warranty for all materials and labor for a period of one (1) year after the date of final acceptance by the CITY.

12.03 SUBMITTALS:

- A. Assemble warranties, bonds and service and maintenance contracts, executed by each of the respective manufacturers, suppliers, and subcontractors.
- B. Number of original signed copies required: six (6) each.
- C. Table of Contents. Neatly typed in orderly sequence.
- D. Provide complete information for each item:
 - 1) Product or work item.
 - 2) Firm, with name of principal, address and telephone number.
 - 3) Scope.
 - 4) Date of beginning of warranty, bond, or service and maintenance contract.
 - 5) Duration or warranty, bond, or service and maintenance contract.
- E. Provide the following information for CITY personnel:
 - 1) Proper procedure in case of failure.
 - 2. Instances which might affect the validity of warranty or bond.
 - 3. Contractor, name of responsible principal, address and telephone number.

12.04 FORM OF SUBMITTALS:

- A. Prepared in duplicate packets.
- B. Format:

- 1) Size 8-1/2-inches x 11-inches, punch sheets for standard 3-post binder.
- 2) Fold larger sheets to fit into binders.
- C. Cover: Identify each packet with typed or printed title "WARRANTIES AND BONDS." List:
 - 1) Title of Project
 - 2) Name of Contractor
 - 3) Tank Name
 - 4) Tank Address
- D. Binders: Commercial quality, three-post binder, with durable and cleanable plastic covers and maximum post width of 2-inches. If more than one volume, identify volume number on spine and cover.

12.05 WARRANTY SUBMITTAL REQUIREMENTS:

- A. For all major pieces of equipment, submit a warranty from the equipment manufacturer. The manufacturer's warranty period shall be concurrent with the CONTRACTOR'S for one (1) year, unless otherwise specified, commencing at the time of final acceptance by the CITY.
- B. The CONTRACTOR shall be responsible for obtaining certificates for equipment warranty for all major equipment which has a 1 HP motor or which lists for more than \$1,000. The ENGINEER reserves the right to request warranties for equipment not considered to be "major" in the CONTRACTOR'S one-year warranty period even though certificates of warranty may not be required.

END OF SECTION TWELVE

SECTION 13: DISINFECTION:

13.01 DESCRIPTION:

This section specifies post-job cleaning procedures for both elevated water storage tanks and new pipe section included in this specification

13.02 QUALITY ASSURANCE:

- A. This section references the following documents. They are a part of this section as specified and modified. In case of conflict between the requirements of this section and those of the listed documents, the requirements of this section shall prevail.
- B. REFERENCE TITLE: AWWA C652 Disinfection of Water Storage Facilities.
- C. REFERENCE TITLE: AWWA C651 Disinfection of Water Mains

13.03 SUBMITTALS:

INFORMATION TO BE PROVIDED: Record of Compliance as described in AWWA C651 and C652.

13.04 DISINFECTING:

- A. After the tank has been painted and the interior surfaces have thoroughly dried, the CONTRACTOR shall remove all visible dirt and contaminating materials. The Interior of the tank shall be disinfected in accordance with Chlorination Method 2 of AWWA C652. The CONTRACTOR shall furnish all of the chlorine required.
- B. During the installation, the CONTRACTOR shall remove all visible dirt and contaminating materials from each pipe section.
- C. The Interior of the piping system shall be disinfected in accordance with one of the acceptable methods listed in AWWA C651.

13.05 TESTING:

- A. The CONTRACTOR shall be responsible for obtaining proper disinfection as determined by bacteriological testing. Two (2) consecutive samples from the tank are required to pass the bacterial tests for the tank to comply with these disinfection requirements. These tests shall be conducted by the CITY laboratory at the CITY's expense.
- B. The CONTRACTOR shall pay all expenses and costs associated with additional sampling and analysis for failure of bacteriological tests including costs associated with additional filling and disinfecting.
- C. Water for filling the tank after the initial disinfection will be provided by the CITY. If the bacteriological testing shows the presence of coliform bacteria, the tank shall be disinfected again. The CONTRACTOR shall reimburse the CITY for the water required to fill the tank after the first filling at the rate of \$1.792 per 1,000 gallons.

END OF SECTION THIRTEEN

SECTION 14: PAINTING:

14.01 **DESCRIPTION**:

- A. This section pertain to the painting of the Elevated Water Tank. This item includes adding a logo to the Beach Tank.
- B. All surfaces encompassed by this specification shall be cleaned, prepared and coated with the designated paint system as specified herein. All coating shall be applied in strict accordance with the manufacturer's instructions.

14.02 RELATED SECTIONS:

- A. Section 10 Summary of Work
- B. Section 11 Submittal Procedures
- C. Section 12 Warranties And Bonds

14.03 REFERENCED STANDARDS:

A. SSPC Steel Structures Painting Council

14.04 QUALITY ASSURANCE:

- A. INSPECTION PROGRAM
 - 1) Throughout the duration of the work, a formalized inspection program will be developed and maintained by the CITY/ENGINEER. The CONTRACTOR will be familiarized with the inspection program and the Project line of authority at the Pre-Construction Conference.
 - Once the CONTRACTOR has been familiarized with this program, it will be the CONTRACTOR'S responsibility to provide the CITY, through the ENGINEER, with clear, accurate information necessary for the required inspection reports.
 - The CONTRACTOR will be responsible for filling out a daily inspection report form. This form will be furnished by the ENGINEER. No request for payment will be processed unless accompanied by completed inspection report forms. Inspections will be performed by the ENGINEER or his designee. It is expected that information furnished on the CONTRACTOR'S inspection reports will coincide with the information recorded during the ENGINEER'S inspections.
 - 4) It is the CONTRACTOR'S responsibility to notify the INSPECTOR when an area is ready for inspection. No work will be approved until the INSPECTOR has performed all required tests and inspections.
 - The CONTRACTOR shall provide for the INSPECTOR all necessary rigging required to complete the inspection and testing operations. The CONTRACTOR shall assist the INSPECTOR in making all required tests and inspections. Deficient areas such as pinholes, holidays, embedded contamination, sags, dry spray, mechanical damage, high / low mils, shall be repaired to meet the requirements of this specification.
 - 6) The CITY will provide part-time coating inspection for the duration of the project. The INSPECTOR shall be on site at critical points in the operation including holiday tests and touch-up work.

B. **INSPECTION AUTHORITY:**

- The ENGINEER has ultimate responsibility for Contract administration and inspection for this project. Field inspection responsibilities will be assigned to the INSPECTOR.
- 2) The INSPECTOR can stop the job if the CONTRACTOR is deviating from the specifications. The CONTRACTOR'S field supervisor shall be advised verbally to stop work and the CONTRACTOR'S office shall be faxed a notice that work has been stopped.
- 3) Each step of the construction is subject to approval by the INSPECTOR prior to proceeding with a subsequent step.
- During the progress of the work and up to the date of final acceptance, the CONTRACTOR shall at all times afford representatives of the CITY, County, State, and Federal agencies having jurisdiction, every reasonable, safe, and proper access for observation of the work done or being done at the site and also at the place of manufacture or preparation.

C. TEST EQUIPMENT FURNISHED BY CONTRACTOR:

- 1) The CONTRACTOR will have the following test equipment available for use by the INSPECTOR at the job site at all times during the progress of the work:
 - a) Sling Psychrometer
 - b) Surface Temperature Gauge
 - c) Wet Film Thickness Gauge
 - d) Dry Film Thickness Gauge (Properly Calibrated)
 - e) National Bureau of Standards thickness plates.
 - f) SSPC VIS-1- Pictorial Surface Preparation Standard
 - g) Holiday Detector. Low voltage type such as Tinker & Rasor Model
 - h) M-1, Series 9533
 - i) Keane-Tator Surface Comparator Number 372 or equal

D. **CONTRACTOR FURNISHED INFORMATION:**

- 1) The following information will be part of the information required for the inspection reports:
 - a) Compressor: Size, Manufacturer, Moisture and Water separators, Air Drier, Cleanliness of Air, Number of Blast Nozzles.
 - b) Safety Equipment: Protective Cloths, Respirators, and Breathing Equipment.
 - c) Paint Equipment: Paint Pump, Spray Gun, and other essential items deemed necessary.
 - d) Materials: Abrasive: (Size, Type, Source, Cleanliness)
 - e) Paints: Type, Manufacturer, Batch No., other information deemed necessary.
 - f) Thinners: Type, Manufacturer, Batch No., and other information deemed necessary.
 - g) Inhibitors: Type, Manufacturer, Batch No., and other information deemed necessary.

- h) Grouts: Type, Manufacturer, and other information deemed necessary.
- Contractor Personnel: Name, Address, and Phone Number of Supervisor.
 Name, Address, and Phone Number of Foreman. Name of each Crewmember or Laborer.
- j) Caulking: Type, Manufacturer, and other information deemed necessary.

E. **CONTRACTOR REQUEST FOR INSPECTION:**

- The CONTRACTOR will notify the INSPECTOR (7) days in advance that portions of the work are ready for inspection and will assist the INSPECTOR in making all necessary tests and inspections.
- 2) No rigging and/or staging shall be removed before required inspection and approval is made. The CONTRACTOR shall assist the INSPECTOR in the use and operation of all equipment for access to the surfaces to be tested.
- 3) The CONTRACTOR will make all necessary rigging available to the INSPECTOR, and assist in the operation of rigging during any and all testing operations.
- 4) Approval by the INSPECTOR of an area does not release the CONTRACTOR from providing the quality and workmanship provided by this Specification.

F. COATING THICKNESS AND CONTINUITY:

- The specified coverage rates of the coatings are minimums. The first coat on metal surfaces refers to the first paint coat and not to conditioning or other pretreatment applications. Coating shall be applied to the thickness specified, and in accordance with these specifications. The minimum dry film thickness at any spot measurement shall not be less than 80% of the specified thickness. Unless otherwise specified, not less than two (2) coats shall be applied. The CONTRACTOR shall furnish a wet film thickness gauge, a dry film thickness gauge, and certified thickness calibration standards for the INSPECTOR use. Dry film thickness gauges shall be Mikrotest III, Elcometer Inspector III, Positest, or Positector.
- After each coat has been allowed to dry, the dry film thickness will be measured by the INSPECTOR. The CONTRACTOR shall not apply a successive coat until the dry film thickness of the preceding coat or coats has been approved by the INSPECTOR.
- 3) Coating system thickness is the total thickness of all the required coats of paint, and does not include passivators or sealers.
- 4) Measurement of dry paint thickness over steel surfaces will be done in accordance with SSPC-PA 2.

G. **HOLIDAY TESTING:**

All interior tank immersion surfaces affected by this project (this may include the area above the high water line), shall be holiday tested for discontinuities such as pinholes, missed and skipped areas, using a low voltage holiday tester. The CONTRACTOR shall furnish to the INSPECTOR a Tinker and Rasor Model M-1 Holiday Detector or equivalent for the testing. Testing shall be done in accordance with NACE RP0188, Discontinuity (Holiday) Testing of Protective Coatings.

- 2) Holiday tests shall not be performed until the finish coat has cured sufficiently that it can be walked on without damage, and water will not have a detrimental effect on the coating (after approximately 2-3 days). Holidays shall be repaired by an additional brush application of finish coat, and then retested.
- 3) The CONTRACTOR shall provide the INSPECTOR all rigging and support personnel needed in performing the holiday test.

14.05 PRODUCT HANDLING:

A. STORAGE

- All coating materials shall be protected from direct sunlight and stored in a separate structure provided by the CONTRACTOR. The structure shall be constructed of non-combustible materials. It shall have sufficient ventilation to prevent the concentration of fumes and vapors.
- Coating storage environmental conditions shall conform to the coating manufacturer's recommendations. The CONTRACTOR shall be solely responsible for the protection of all the material stored by him at the job site.
- 3) Coating materials shall be delivered to the job site in the original and unopened containers, with legible labels, marked with the proper designation of the product, as well as the manufacturer.
- 4) All coating materials at the job site shall be subject to inspection.
- 5) An approved environmental paint spill kit and container shall be located near the paint storage area.
- 6) All coating components will be delivered in unopened containers. They will be protected from freezing and over heating during shipment.
- 7) All coating components must be stored at temperatures above freezing and out of the weather. The containers must remain unopened until they are ready to be used.

B. **MIXING:**

- Mechanical mixers or shakers shall be used to mix the coating after properly measuring the required components. Catalysts, thinners, and other components shall only be added in exact quantities and at the times specified by the coating manufacturer. Containers used for mixing shall be clean and dry. Mixed materials that are not used prior to expiration of the pot life shall be discarded.
- 2) All coatings materials shall be mixed and thinned in the presence of the INSPECTOR. Plural component materials will not be approved for application unless the INSPECTOR can verify the proper proportions were mixed, and they had proper Induction time after mixing.
- 3) An approved environmental paint spill kit and container shall be located near the paint mixing area.

An appropriate type of fire extinguisher shall be kept nearby.

14.06 SUBMITTALS:

- A. The following information shall be provided in accordance with these specifications. Information on each coating system shall be delivered to the ENGINEER two (2) weeks before applying that coating system. A list of materials proposed to be used under this section shall be provided within ten (10) days of the Notice to Proceed.
- B. For each primer, intermediate, and finish coating the CONTRACTOR shall provide the Manufacturer's Application Instructions and the data listed below:
 - 1) Surface preparation recommendations.
 - 2) Primer, intermediate, and finish coating, pot life and specific mixing instructions.
 - 3) Induction time after mixing.
 - 4) Minimum and maximum dry and wet film thickness per coat.
 - 5) Minimum and maximum curing time between coats including atmospheric conditions for each.
 - 6) Curing time before submergence in liquid.
 - 7) Thinner and thinning ratios to be used with each paint.
 - 8) Ventilation requirements.
 - 9) Allowable atmospheric conditions during which the paint may be applied, including ambient temperature, relative humidity and surface temperature.
 - 10) Allowable applications methods.
 - 11) Maximum allowable moisture content of surface to be painted.
 - 12) Maximum storage life.
 - 13) Manufacturer's certification that painting materials are in accordance with the appropriate reference standards.
 - 14) Certificates of approval from the Florida Department of Environmental Protection (FDEP), that the proposed interior coatings are approved for use with potable water.
 - 15) Material Safety Data Sheets and cautions concerning health hazards.

14.07 COLOR SELECTION:

- A. All colors are as specified by the CITY's color schedule after submittal of the manufacturers color charts.
- B. The CONTRACTOR shall submit a color chart, from the specified coating manufacturer, to the CITY to select a color for the exterior tank and logo. The CITY shall submit their choice to the CONTRACTOR in writing before application of coatings.

14.08 DAMAGE CLAIMS:

The CONTRACTOR shall be responsible for all damages that may be caused by this painting operation to surrounding property.

14.09 MATERIALS:

A. The products referenced in this section are presented as a standard of comparison. Products manufactured by other manufacturers may be substituted upon request. Requests for substitution must be in accordance with PART 1.06 above. Only products of one manufacturer shall be used in a particular coating system.

- B. Materials, supplies and articles provided shall be the standard products of manufacturers. Paints in a particular coating system shall be the products of a single manufacturer unless otherwise specified.
- C. No lead containing coatings shall be used.

14.10 COATING MATERIALS:

- A. Each of the following manufacturers is capable of supplying the industrial coating materials specified in this specification. Where manufacturers and paint numbers are listed, it is to show the type and quality of coatings that are required. Proposed substitute materials for the paint numbers shown must be proven to satisfy the material descriptions and to equal or exceed the properties of the listed materials.
 - 1) Tnemec Company, Inc.
 - 2) Induron Protective Coatings, Inc.
 - 3) Sherwin Williams Co.
- B. Standard products of manufacturers other than those specified will be accepted when it is demonstrated to the Engineer that they are equal in composition, durability, usefulness and convenience for the purpose intended. The written acceptance by the CITY shall be obtained before any such alternate products are ordered by the CONTRACTOR. Request for substitution will be considered provided the following minimum conditions are met:
 - 1) The proposed coating system shall use an equal or greater number of separate coats to achieve the required dry film thickness.
 - 2) The proposed coating system shall use coatings of the same generic type.
 - 3) Request for substitution shall have the directions for application and description literature, which includes generic type, nonvolatile content by volume, and information confirming that the substitution is equal to the specified coating system.
 - 4) The contractor shall provide certified laboratory data sheets showing the results of complete spectrographic and durability tests performed on the proposed substitute. A laboratory which conforms to the provisions of ASTM E329 and which is a member of the American council of Independent Laboratories shall perform tests. Costs incurred in the testing program shall be borne by the contractor.
 - 5) No extra contract time for tank out of service will be granted for evaluation of substitute materials.

14.11 INTERIOR COATINGS DESCRIPTION:

- A. Beach Tank
 - 1) Interior (Wet) Service (as needed):
 - a) Coating: Two (2) coats of high build, high solids epoxy lining system, NSF 61 approved.
 - b) Caulking: Sika-flex 1a, a one component polyurethane sealant. (NSF 61 Approved.)

14.12 EXTERIOR COATINGS DESCRIPTION:

- A. Beach Tank
 - 1) OPTION "A":
 - a) One (1) full coat of aromatic urethane, zinc-rich primer, one (1) full coat of aliphatic acrylic polyurethane intermediate coat, and (1) one full coat of advanced thermoset fluoropolymer polyurethane.
 - 2) OPTION "B":
 - a. One (1) spot coat of surface tolerant epoxy, one (1) spot coat of aliphatic acrylic polyurethane intermediate coat, and one (1) full coat of advanced thermoset fluoropolymer polyurethane.

14.13 ABRASIVE BLAST MATERIALS:

All abrasive blast material shall be "Black Beauty" or approved equal.

14.14 **GENERAL**:

- A. All work shall be accomplished by skilled workmen in a professional manner.
- B. All surface preparation, repairs, and coating or lining application shall be done by experienced personnel. The awarded contractor shall be able to provide proof of five successful projects as prime contractor on projects of similar size, completed in the last five years. Similar projects shall be a minimum of 250,000-gallon tank size and shall include full containment.
- C. All work shall comply with Local, County, State, and Federal regulations concerning pollution control.
- D. The close proximity of private and public property will require containment of blast abrasives, paint over-spray, and spatter.

14.15 **SAFETY:**

- A. The CONTRACTOR shall provide site visits by the company's safety officer at regular intervals to ensure compliance with all safety standards by the workers including rigging construction, fall prevention and protection, and personal protective equipment. The safety officer shall visit the site within the first two days of starting work involving rigging.
- B. All rigging shall meet OSHA requirements, and shall be operated in a safe manner, and will conform to industry standards. All rods and other tank appurtenances that are used for rigging purposes shall be carefully checked for structural integrity before use in climbing or rigging. Deficiencies shall be reported and corrected before use.
- C. NOTE: The Contractor is responsible for the integrity of any rigging connections. All rods and rigging points shall be carefully checked for structural integrity before use in climbing or rigging of the tank. Items found to need repair shall be disassembled, cleaned and repaired.

14.16 PROTECTION OF AREAS NOT TO BE COATED:

- A. All areas that are not specified to be coated or repaired shall be adequately protected to avoid any damage or overspray during all repairs, washing, blasting, and painting operations. The CONTRACTOR shall confer with the CITY before conducting any work, to clarify these areas.
- B. The areas NOT to be coated include:
 - 1) All lighting, and all cabling.
 - 2) All antennae and connected wiring.
 - 3) Cathodic protection system wiring.
- C. Tank surfaces under items that are not to be coated shall be coated. Items not to be coated shall be temporarily relocated while the area is coated. After coating has cured, the relocated equipment shall be returned to its original location. Cell phone antenna equipment shall be relocated by the cell phone company's designated contractor ONLY.
- D. The aircraft obstruction light on top of the tank shall be in continuous operation during this project and shall not be obstructed or damaged.
- E. Any damage shall be repaired at the CONTRACTOR's expense.

14.17 VENTILATION:

The CONTRACTOR shall provide forced air ventilation while work is being done inside the tank, after each coat is applied and continue after completion of painting for a minimum period of seven days to insure proper cure of the coating. Air shall be exhausted from the lowest portions of the tank with the top openings kept open and clear. Ventilation requirements will be in strict accordance with the manufacturer's recommendations, this Specification and all OSHA requirements as applicable.

14.18 SURFACE PREPARATION:

- A. The CONTRACTOR shall test all coating to be removed to assure that the coating will meet environmental requirements for removal and disposal.
- B. Surfaces to be coated shall be cleaned in accordance with SSPC-SP1 (Solvent Cleaning). Before applying coating or surface treatments, oil, grease, dirt, rust, loose mill scale, old weathering coatings, and other foreign substances shall be removed, except as specified. Oil and grease shall be removed before mechanical cleaning is started.
- C. Clean cloths and clean fluids shall be used in solvent cleaning. Cleaning and painting shall be scheduled so that dust and spray from the cleaning process will not fall on wet, newly painted surfaces.

14.19 ABRASIVE BLASTING:

Where mechanical cleaning is accomplished by blast cleaning, the abrasive used shall be washed, graded and free of contaminants, which might interfere with the adhesion and performance of the coatings. Blast abrasive shall be "Black Beauty" or approved equal, capable of achieving a surface profile of 1 to 3 mils (unless otherwise recommended by the paint manufacturer). The CONTRACTOR shall furnish for the INSPECTOR's use, a Keane-Tator Surface Comparator Number 372 or equal.

- Preparation of metallic surfaces shall be based upon comparison with SSPC-VIS 1 (ASTM D2200), and as described herein. The CONTRACTOR shall furnish the photographic standards. To facilitate inspection, the CONTRACTOR shall, on the first day of abrasive blasting operations, abrasive blast metal panels to the standards specified. Plates shall measure a minimum of 8.5 inches by 11 inches. Panels meeting the requirements of the Specifications shall be initialed by the CONTRACTOR and CITYS Representative and coated with a clear non-yellowing finish. One of these panels shall be prepared for each type of abrasive blasting and shall be used as a comparison standard throughout the project.
- 3) Compressed air for blast cleaning shall be clean, dry, and oil free as confirmed by a blotter test each day prior to beginning blasting. Test air quality by directing the air stream from the blast nozzle without abrasive onto a clean piece of blotter paper for 1 minute. Inspect the blotter for contamination.
- 4) All abrasive and dust from the blasting operation shall be removed from the surfaces before the painting application has begun.
- 5) Abrasive blasted surfaces shall be coated the same day that blasting was done, and before any rust bloom occurs.
- 6) Worn nozzles, tips, etc., shall be replaced regularly. Effective oil and water separators shall be used and serviced on all air lines.

14.20 ULTRA HIGH PRESSURE WATER:

A. All surface preparation using Ultra High Pressure (UHP) Water shall comply with SSPC-SP12 – WJ-1.

B. BEACH TANK

- 1) INTERIOR WET
 - Mold, mildew, chalk, loose paint, organic deposits, or other surface contamination shall be removed by High Pressure Water Wash (min. 4000 psi) of the entire interior wet area prior to abrasive blast cleaning.
- 2) The entire interior shall be abrasive blast cleaned to SSPC-SP10 (Near White Metal).
- 3) Solvent wipe all areas to be coated in accordance with SSPC-SP1 prior to application of the specified primer.

C. INTERIOR - DRY

- 1) Oil, grease, mold, mildew, chalk, and other surface contamination shall be removed by High Pressure Water Wash (min. 2500 psi).
- All Interior Dry surfaces shall be abrasive blasted to SSPC-SP7 (Brush-off Blast).
- 3) All rusted and abraded areas, and all previously bare metal, shall be abrasive blasted to SSPC-SP6 (Commercial Blast).

D. EXTERIOR

- 1) OPTION A Full removal
 - a) Remove all coatings with UHP Water Jetting in accordance with SSPC-SP12 WJ-1, using a closed cycle system. Removal shall be

performed with a vacuum "crawler" such as NLB Corporation Model SRT-10, or approved equal. All water and paint chips shall be removed and contained by the vacuum system.

2) OPTION B – Topcoat

- a) Mold, mildew, chalk, loose paint, organic deposits, or other surface contamination shall be removed by High Pressure Water Wash (min. 4000 psi) of the entire interior wet area prior to abrasive blast cleaning
- b) All rusted and abraded spots shall be power tool cleaned to SSPC-SP11 (Bare Metal).
- c) The CONTRACTOR shall take every precaution necessary to contain dust from the abrasive blasting operation blowing towards the surrounding buildings and passing traffic.

14.21 GENERAL APPLICATION PROCEDURES

- A. All painting equipment shall be maintained in good working order and shall be comparable to that described in the coating manufacturer's most recent application instructions. It shall be thoroughly cleaned and inspected daily.
- B. Unless otherwise specified, the application of paint shall be in accordance with SSPC-PA-1 latest edition and the paint manufacturer's printed instructions for surface preparation, mixing, thinning, and paint application unless otherwise specified herein. The CONTRACTOR shall fully comply with all recommendations and instructions set forth by the paint manufacturer. All coatings shall be applied before the shelf life of the coating expires.
- C. Paint shall only be applied over thoroughly dry surfaces, with a surface temperature that conforms to the manufactures minimum maximum limits, and the relative humidity shall not exceed 85%. The surface temperature must be at least 5 degrees above the dew point. Paint shall not be applied to a condensing surface. Paint shall not be applied when freshly painted surfaces may be damaged by rain, fog, dust or condensation and/or when it can be anticipated that these conditions will prevail during the drying period.
- D. Except where otherwise specified, thinning shall only be done when necessary for the workability of the coating material and then only in accordance with the coating manufacturer's most recent printed application instructions. Use only approved manufacturer's thinner. Thinner shall only be added in the exact quantities as recommended by the manufacturer.
- E. Paint shall be applied in a uniform layer, with a 50% over-lap pattern. All runs and sags shall be brushed out immediately or the paint will be removed and surface recoated.
- F. All fasteners, welded seams, edges, holes, etc. shall have special care taken in applying the prime and topcoat. These areas shall be brush coated before applying the coating to remaining surfaces. This is to insure proper dry film thickness on these areas.
- G. Areas inaccessible to spray shall be brushed. If inaccessible by brush, daubs or sheepskins may be used if approved by the manufacturer. Top quality, properly styled brushes and rollers shall be used. The brushing or rolling shall be done so that a smooth

coat as nearly uniform in thickness as possible is obtained. Brush or roller strokes shall be made to smooth the film without leaving deep or detrimental marks.

- H. Drying time between coats will adhere to the coating manufacturer's recommendation with conditions of temperature and humidity taken into account. All paint and coating materials shall be stored prior to application under cover and at temperature within 10 degrees F. of the anticipated application temperature.
- I. The dry film thickness of each coat and the entire system shall follow the coating manufacturer's recommendations and this specification. The number of coats specified shall be a minimum to achieve the specified film thickness.
- J. All paint damaged areas, which shall be touch-up painted, shall be feathered after surface preparation to provide a smooth, even surface before priming. Touch-up systems will be the same as the original specification. Manufacturer's complete touch-up recommendations shall be followed.

14.22 COATING SYSTEMS:

- A. All interior coatings, caulking materials, and linings of potable water tank shall be approved for application in accordance with NSF-61 for use in potable water systems.
- B. All interior surfaces shall be cleaned as applicable in Section 3.05.
- C. Each coat shall be of a contrasting color to facilitate application and inspection.
- D. The CONTRACTOR shall submit coating manufacturer's color charts to the ENGINEER within ten (10) days after Contract Award. Finish colors will be selected by the CITY.
- E. A five-gallon kit of all finish coats of paint shall be supplied to the CITY as touch-up paint. This kit shall be "fresh" at the time of final acceptance of the tank. The touch-up kit shall have a minimum shelf life of one (1) year.
- F. The CONTRACTOR shall be responsible for all damages that may be caused by this painting operation to surrounding property and to vehicles traveling on and parked on adjacent properties and roadways.
- G. The CONTRACTOR shall take every precaution necessary to avoid paint splatter blowing toward the street or any surrounding structures, including parking areas and buildings. This also includes vehicles driving near the tank.

H. BEACH TANK

- 1) Interior (Wet) Coating System:
 - 1) PRE-COAT: Apply by brush, one (1) coat of the specified first coat to all weld seams, roof lap joints, structural members, manholes, edges, lugs and brackets. Drying time at this point is not critical and application of first coat may proceed as soon as brushed areas are coated.
 - 2) PRIME COAT: Apply by brush, roller, or spray to all bare metal, prepared interior surfaces, Tnemec Company's Series N140 PotaPox Plus at a dry film thickness of 3 mils to 5 mils.

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- 3) INTERMEDIATE COAT: Apply by brush, roller, or spray to all interior surfaces, Tnemec Company Series N140 PotaPox Plus at a dry film thickness of 3 mils to 5 mils.
- 4) TOP COAT: Apply by brush to all interior surfaces, Tnemec Company Series N140 PotaPox Plus at a dry film thickness of 3 mils to 5 mils.
- 5) COVERAGE RATES: Maximum coverage rates shall not exceed manufacturer's recommendations per coat. The total dry film thickness of the interior system shall be no less than 9.0 mils.
- 6) CAULKING: After the finish coat has cured per the manufacturer's recommendations, all of the roof lap joints, angles, and brackets that cannot be removed and other areas as indicated by the inspector shall be caulked using a one component polyurethane sealant as manufactured by Sika Corporation, Sika-flex 1a. The sealant shall be applied per the manufacturer's data sheets.

2) Interior (Dry) Coating System

- 1) PRIME COAT: Apply by brush, roller, or spray, to all bare metal interior dry surfaces Tnemec Company's Series 135 Chembuild at a dry film thickness of 3.0 mils to 5.0 mils.
- 2) INTERMEDIATE COAT: Apply by brush, roller, or spray, to all interior dry surfaces Tnemec Company's Series 135 Chembuild at a dry film thickness of 3.0 mils to 5.0 mils.
- 3) Exterior Coating System OPTION A (Full Removal):
 - 1) PRIME COAT: Apply by brush, roller, or spray, to all exterior surfaces Tnemec Company's Series 90-97 Tneme-Zinc at a dry film thickness of 2.5 mils to 3.5 mils.
 - 2) INTERMEDIATE COAT: Apply by brush, roller, or spray, to all exterior surfaces Tnemec Company's Series 73 Endura-Shield at a dry film thickness of 2.0 mils to 3.0 mils.
 - 3) TOP COAT: Apply by brush, roller, or spray, to all exterior surfaces, one coat of Tnemec Company's Series 700 Hydroflon, at a dry film thickness of 2.0 mils to 3.0 mils.
 - 4) LETTERING/LOGO: Apply using one coat of the specified top coat in addition to the specified coating system.
 - 5) COVERAGE RATES: Maximum coverage rates shall not exceed manufacturer's recommendations per coat. The total dry film thickness of the exterior system shall be no less than 7.0 mils
- 4) Exterior Coating System OPTION B (Topcoat only):
 - 1) PRIME COAT: Apply by brush, roller, or spray, to all bare metal exterior surfaces Tnemec Company's Series 135 Chembuild at a dry film thickness of 3.0 mils to 5.0 mils.

2) INTERMEDIATE COAT: Apply by brush, roller, or spray, to all previously primed exterior surfaces Tnemec Company's Series 73 Endura-Shield at a dry film thickness of 2.0 mils to 3.0 mils.

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- TOP COAT: Apply by brush, roller, or spray, to all exterior surfaces, one coat of Tnemec Company's Series 700 Hydroflon, at a dry film thickness of 2.0 mils to 3.0 mils.
- 4) LETTERING/LOGO: Apply using one coat of the specified top coat in addition to the specified coating system.
- 5) COVERAGE RATES: Maximum coverage rates shall not exceed manufacturer's recommendations per coat. The total dry film thickness of the exterior system shall be no less than 7.0 mils.

END OF SECTION FOURTEEN

SECTION 15: REPAIRS & RENOVATIONS:

15.01 DESCRIPTION

All repairs and renovations to be performed are as listed herein.

15.02 RELATED SECTIONS:

Section 10 Scope of Work Section 12 Warranties and Bonds Section 14 Painting

15.03 REFERENCED STANDARDS:

A. AWWA D100 Welded Steel Tanks For Water Storage

B. AWS D1.1 American Welding SocietyC. SSPC Steel Structure Painting Council

D. NACE National Association of Corrosion Engineers

E. NSF Standard 61 Drinking Water System Components-Health EffectsF. MSS SP-69 Manufacturers Standard Society Standard Practice

15.04 SUBMITTALS:

- A. Structural: Submit detailed fabrication and erection drawings. Indicate all dimensions, method of assembly, connections and bill of materials.
- B. Should more than one submittal be required, later submittals should clearly identify all changes.
- C. Indicate all shop and erection dimensions and details, including cuts, copes, connections, holes, threaded fasteners and welds.
- D. Indicate all shop and field welds by AWS A2.0 "Welding Symbols".

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- E. Revise original approved shop and erection drawings to correspond with changes made in the field.
- F. Submit Product data, (manufacturer's literature), Specifications and installation instructions for manufactured items.
- G. Upon completion of all work, "as built" drawings shall be submitted. These drawings shall be marked up to show all changes or modifications made that deviate from the approved submittal drawings. Final payment will not be processed until the "as built" drawings are submitted.

15.05 TANK REPAIR REQUIREMENTS - BEACH TANK

- A. <u>Access Tube</u>: Replace the top 36 inches of the access tube. See Drawing 10-0781-R8 for general details. The new section of tube shall be the same material, thickness, and diameter as the existing. Butt-weld the new section to the existing section, using a full penetration weld. Install a new top plate and roof hatch on the new tube section, similar to existing. Re-attach existing ladders to both sides of the tube section. See drawing 10-0781-R3 for more detail.
- B. Roof Vent: Install a new 24" diameter tank mounting flange and new mushroom-style vent assembly. The new vent/screen assembly shall have a capacity to pass air so that at the maximum possible rate of water, either entering or leaving the tank, excessive pressure will not be developed. The vent screen shall be designed and so constructed as to prevent the entrance of birds, insects or animals and ensure fail-safe operation in the event that the insect screens frost over or become blocked. Vent design shall be in accordance with AWWA D100. The neck and mounting flange shall be welded carbon steel with a bolted flange to attach the vent. The vent body and hood shall be constructed of aluminum and shall be bolted to the mounting flange. The screen shall be non-corrosive material.
- C. <u>Roof Hatch</u>: Install a new 24" diameter roof hatch in place of the existing roof hatch. See Drawing 10-0781-R4 for general details. The new hatch shall be similar in material, design, and fabrication to the existing hatch. Install the hatch so that the lid swivels to the north when opening.
- D. Interior (Wet) Ladder: Install a new carbon steel ladder in place of the existing interior tank ladder. The ladder shall begin no more than 1 foot above the tank floor, and extend up to within one foot of the tank roof. The ladder shall be no less than 7 inches from the access tube at any point and attached to tube using 3/8"-thick carbon steel stand-offs, on both sides of the ladder, welded to the ladder and the tube, and spaced no more than 10 feet apart. The ladder rails and rungs shall meet current OSHA requirements for dimensions and weld details for steel, fixed ladders.
- E. <u>Climbing Safety Devices</u>: Install a new, cable-type climbing safety device on the new Interior (Wet) Ladder. All parts used on this installation shall be manufactured and approved for use as part of a fall prevention device. The cable shall be stainless steel. Completely install device as instructed by the manufacturer.
- F. Overflow Pipe: Replace the entire overflow pipe, from the weir box at the high water line, down to the discharge at the base of the tank. The new pipe shall be carbon steel, Schedule 40, welded steel pipe, same size as existing. Install new pipe in same location and routing as existing pipe. Seal weld both sides of tank shell and pillar wall where pipe penetrates.

- G. <u>Inlet Pipe Tank Penetration:</u> The quality of the welds where the Inlet Pipe penetrates the base of the tank bowl is in question. This project will address this area as follows:
 - 1) Abrasive blast welds on the topside and bottom side around Inlet Pipe penetration. Remove all coatings and corrosion products.
 - 2) Arc gouge out the leaking section of weld at the inlet pipe penetration. Continue arc gouge at least 6 inches on either side of the leaking area.
 - 3) Arc gouge the weld in the same area on the top side of the tank floor.
 - 4) CARE SHALL BE TAKEN TO NOT HARM THE PIPE WALL while gouging out welds.
- H. Fillet weld pipe to tank joint with a continuous fillet weld to achieve a ½" fillet weld. Use the following procedure:
 - 1) Install one pass over the length of the area on the topside of the floor using 6010 weld rod.
 - 2) Install two passes over the length of the area on the bottom side of the floor using 7018 weld rod.
 - 3) Arc Gouge out previously installed 6010 weld pass on the top side of the floor.
 - 4) Install two passes over the length of the area on the topside of the floor using 7018 weld rod.
 - 5) Perform a Dye Penetrant test on the new weld section.
- I. <u>Patch Plate</u>: Install a ¼"-thick, lap welded patch plate over the exterior of the hole in the pillar, located approximately 24" above the ground on the west side of the tank. The patch plate shall be 8" in diameter, ¼" thick, A36 steel, located on the exterior of the pillar, and completely seal welded on the interior and exterior.
- J. <u>Isolation Valves</u>: Replace three 12" isolation valves located at the base of the tower for the Inlet Pipe. See product details in Part 2.02 in this Section.
- K. <u>Platform Floors</u>: Replace entire floor on lower and upper platforms inside the pillar. Both floors shall be fabricated from 3/16"-thick, A36 carbon steel. The new floor shall be welded to the existing mounts around the entire perimeter. If butt welds are necessary for fit-up, they shall be full penetration welds. All welds shall be continuous (no skip welding). Abrasive blast and paint top and bottom of floor plates in accordance with Interior-Dry coating specifications.
- L. <u>Tank Drain Valve</u>: Replace existing 4" gate valve in the tank drain line, located directly under the tank bowl, near the overflow pipe. The new valve shall comply with AWWA standards and be similar in design and material to the existing valve.

15.06 QUALITY ASSURANCE:

- A. Design Criteria: AWWA D100 and C200 Series (current edition) (individual standards as applicable).
- B. Qualifications of Suppliers and Personnel:
 - 1) Steel Fabricator: Not less than 5 years continuous experience in the fabrication of structural steel.

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- Steel Erector: Not less than 5 years continuous experience in the erection of tanks or similar structures.
- 3) Pipe Fabricator: Not less than 5 years continuous experience in the fabrication of piping systems.
- 4) Pipe Fitter/Installer: Not less than 5 years continuous experience in the installation of large bore piping for potable water use.
- 5) Welding: All welding shall be performed by welders who are currently qualified by tests as prescribed in AWS D1.1 "Qualification Procedure".
- 6) Use experienced riggers to erect steel. Carefully plan and lay out work so that a minimum of cutting and removal of undamaged material will be necessary.

15.07 **WARRANTY**:

All material and workmanship covered under this section shall be guaranteed as outlined in Section 12.

15.08 EXTRA WORK:

Any work items that are found after the work has begun shall be brought to the attention of the Engineer. These out of scope items shall be processed by Directive only.

15.09 MATERIALS:

- A. All materials shall be new and shall be in conformance with AWWA Standards.
- B. Pipe and Fittings:
 - Pipe and fittings shall be manufactured to the nominal dimension cited in the applicable ASTM standard, and shall be made by one manufacturer. Fabricated fittings shall not be permitted.
 - 2) All pipe and fittings shall conform to National Sanitation Foundation (NSF) Standard 61 or the health effects portion of NSF Standard 14.
- C. Structural steel shapes, plates and bars: ASTM A36.
- **D.** Machine bolts: Use ASTM A307 machine bolts at all connections not indicated on Drawings as high-strength or stainless steel.

E. Welding electrodes:

1) Mild steel-covered arc welding electrodes for A36 steels: AWS A5.1, E70XX Series, low hydrogen, having a minimum yield point of 60,000 psi.

15.10 **ISOLATION VALVES - 12"**:

- A. Valves shall be Clow AWWA valves as manufactured by Clow Valve Company, Oskaloosa, lowa.
- B. Valves shall conform to the latest revision of AWWA standard C-509 covering resilient seated gate valves and be approved by ULFM.
- C. Valves shall be non-rising stem, opening by turning stem right and provided with a handwheel with the word 'open' and an arrow cast in the metal to indicate direction to open.
- D. The wedge shall be of cast iron completely encapsulated with rubber.
- E. The sealing rubber shall be permanently bonded to the cast iron wedge to meet ASTM tests for rubber metal bond ASTM D429.

- F. Valves shall be supplied with o-ring seals at all joints. No flat gaskets allowed.
- G. Stems for NRS assemblies shall be cast bronze with integral collars in full compliance with AWWA. The NRS stem stuffing box shall be the o-ring seal type with two o-rings located above thrust collar and one o-ring below. The two o-rings above the thrust collar shall be replaceable with valve fully open and subjected to full rated working pressure
- H. There shall be two low torque thrust bearings located above and below the thrust collar. The stem nut shall be independent of the wedge and shall be made of solid bronze. There shall be a smooth, unobstructed waterway free of all pockets, cavities and depressions in the seat area.
- I. The body and bonnet shall be coated with fusion bonded epoxy both interior and exterior, complying with AWWA C-550 and be NSF 61 approved.
- J. Each valve shall have maker's name, pressure rating and year in which manufactured cast on the body.

15.11 MATERIAL HANDLING:

- A. Storage of Materials
 - 1) Store steel to be incorporated into this project above ground on platforms, skids or other approved supports.
 - 2) Protect steel from corrosion.
 - 3) Store welding electrodes in accordance with AWS D12.1.

15.12 FABRICATION:

All fabrication shall be done by manufacturers who are regularly engaged in the manufacture of the type of work herein specified.

15.13 SCHEDULE:

All repair and renovation work shall be accomplished prior to start of any painting operations.

15.14 ERECTION:

All work shall be accomplished by skilled workmen in a workmanlike manner. All welders shall hold current AWS certification and shall submit all credentials to the Engineer prior to starting work. All welding will be subject to testing in accordance with Section 11 of AWWA D100.

CAUTION: It is understood that the contractor may use existing structural members for access and rigging purposes. All rods and existing members shall be carefully checked for structural integrity before use in climbing or rigging of the tank. Rods found to need repair shall be disassembled, cleaned and repaired as directed by the ENGINEER.

END OF SECTION FIFTEEN PROJECT [B] BEACH TANK END OF TECHNICAL SPECIFICATIONS